Securepoint

SECUREPOINT

Product Overview

This manual applies to the following products:

VPN-Product

Terra VPN-Gateway

The Terra VPN-Gateway has less functions than the Securepoint UTM products.
These limitations affect the functions of the applications proxies, virus scanner, spam filter and content filter.
If you purchase the Terra VPN-Gateway, you can easily upgrade to the Securepoint UTM product with a registration key. At this yearly update costs are incurred. For further information contact our sales department: vertrieb@securepoint.de

UTM Products

- Terra UTM-Gateway
- Piranja
- RC100
- RC200
- RC300
- RC310
- RC400
- RC410
- Securepoint 10 for Modular Server
- Securepoint 10 for VMware

All Securepoint UTM products have the full UTM function volume.

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1 Introduction

The internet is an ubiquitous information and communication medium in our time. Often the computer or the network is permanent connected to the internet, because a lot of businesses are executed online.
It is mostly disregarded that the internet must be seen as a security risk. This is especially critical, if confidential data are stored on the systems. The security of these data cannot be guaranteed. The information could be spied out or may be irrevocable lost by a computer virus.

Software firewalls, which are installed on the computer, don't meet requirements, because the dangerous programs are already in the net.
A system is demanded, which is positioned between the internet and the local network, to guard the network against destructive programs and to control the communication with the internet.

The Securepoint Unified Threat Management (UTM) offers a complete solution with comprehensive safety measures in respect of network-, web- and e-mail security. The appliance offers firewall-, IDS- and VPN-functionality, proxies, automatic virus scanning, web content- and spam-filtering, clustering, high availability und multipath routing functionality. It provides several authentication methods and encrypted access to the network.
The combination of these functions in one system minimizes the administrative and integrative complexity in contrast to individual solutions.
The appliance is administrated with a clearly structured web-interface.
The Securepoint UTM solution is available as a pure software version or as sundry appliances which are especially adapted to the requests. The solutions vary from home office and small office networks to great company networks with several hundred computers.

Part 1

The Administration Interface

2 The Appliances

The firewall software is installed on hardware, which is especially designed for the purpose of network protection. The portfolio of Securepoint contains 7 appliances. The appliances are adapted to different network quantities and consequently the processing speed, the memory capacity, the disk space, the throughput rate and the numbers of interfaces of the machines vary.

machine	image	user	FW throughput	VPN-throughput
Piranja		up to 5	100 Mbit/s	70 Mbit/s
RC 100		10 to 25	100 Mbit/s	100 Mbit/s
RC 200		25 to 50	400 Mbit/s	260 Mbit/s
RC 300		50 to 100	1000 Mbit/s	700 Mbit/s
RC 310		50 to 100	1000 Mbit/s	1000 Mbit/s
RC 400		100 to 500	1000 Mbit/s	1000 Mbit/s
RC 410		100 to 500	1000 Mbit/s	1000 Mbit/s

machine	CPU	RAM	HDD	interfaces	USB ports
Piranja	VIA C3 / Eden 533 MHz	1 GB	Compact Flash 512 MB	3 x 10/100 Ethernet ports	1
RC 100	VIA C7 1 GHz	1 GB	80 GB	3 x 10/100 Ethernet ports	1
RC 200	Intel M 1,0 GHz	1 GB	80 GB	4 x 10/100/1000 Ethernet ports	5
RC 300	Intel Core2 Duo E4500 2 x 2,2 GHz	1 GB	80 GB	6 x 10/1000 Ethernet ports	4
RC 310	Pentium D 2 x 3,4 GHz	1 GB	2 x 80 GB	6 x 10/1000 Ethernet pPorts	4
RC 400	Xeon 5335 1,8 GHz	2 GB	2 x 73 GB	10 x 10/1000 Ethernet ports	4
RC 410	Xeon 1,8 GHz	2 GB	2 x 73 GB	10 x 10/1000 Ethernet ports	4

3 Positioning the Appliance

In the network assembling the appliance is positioned behind the modem. If a network is actuated behind the appliance, a switch or hub must be set between the UTM and the network. If you only use one computer, you can conduct it directly to the appliance.

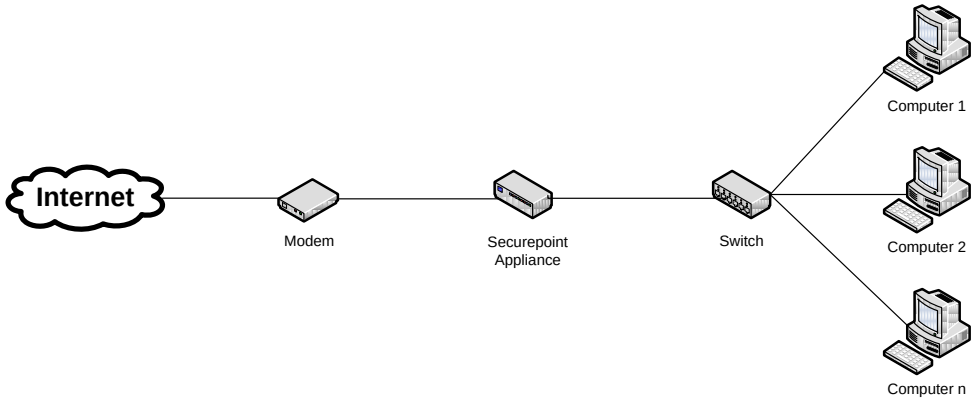


fig. 1 position of the appliance in the network

3.1 Piranja and RC 100

The Piranja and the RC 100 appliances have 3 Ethernet ports (LAN 1 to LAN 3), one serial interface (D-Sub) and two USB ports.
The three network ports are destined for different nets. The interface eth0 is reached through LAN 1and is designated for the external network (internet). LAN 2 represents the second interface eth1 and is designated for the internal network. The port LAN 3 uses the interface eth2 and is destined for a demilitarized zone (DMZ). It can also be used for a second internal network or a second external connection.

fig. 2 rear view of the Piranja respectively of the RC 100

port	interface	net
LAN 1	eth0	external (internet)
LAN 2	eth1	internal
LAN 3	eth2	DMZ

3.2 RC 200

The RC 200 has 4 LAN ports. The assignments of the first three ports are identical to the previous it described ones. The port LAN 4 is bounded to the interface eth3 und is for free disposal. You could connect another internal net, another DMZ or a second internet connection to this port.

fig. 3 rear view of the Piranja respectively of the RC 100

port	interface	net
LAN 1	eth0	external (internet)
LAN 2	eth1	internal
LAN 3	eth2	DMZ
LAN 4	eth3	free disposal

3.3 RC 300

The RC 300 has 6 LAN ports. Contrary to smaller dimensioned appliances the ports are numbered serially from right to left. The ports at the machine are not labeled. Take the attribution from the figure.

fig. 4 front view of the RC 300 (schematic)

port	interface	net
LAN 1	eth0	external (internet)
LAN 2	eth1	internal
LAN 3	eth2	DMZ
LAN 4	eth3	free disposal
LAN 5	eth4	free disposal
LAN 6	eth5	free disposal

3.4 RC 400

This Appliance has 8 LAN ports. The sockets are arragned in two blocks of 4 connectors. The ports are numbered top down and from left to right. LAN 1 and LAN 3 are destined for the predefined networks. The ports in the machine are not labeled. Take the attribution from the figure.

fig. 5 front view of the RC 400 (schematic)

port	interface	net
LAN 1	eth0	external (internet)
LAN 2	eth1	internal
LAN 3	eth2	DMZ
LAN 4	eth3	free disposale
LAN 5	eth4	free disposale
LAN 6	eth5	free disposale
LAN 7	eth6	free disposale
LAN 8	eth7	free disposale

4 Administration Interface

4.1 Connecting the Appliance

You access the appliance with your browser on the IP address of the internal interface on the port 11115 using the https (SSL) protocol.
The factory setting for the internal IP address is 192.168.175.1. The port 11115 cannot be changed. It is reserved for the administration.
User name and password are set to the following by default.
User name: admin
Password: insecure

- Start your ***internet browser*** and insert the following value into the address field: https://192.168.175.1:11115/
  If you have changed the IP address at the installation, replace the IP address 192.168.175.1 with the new one.
- The dialog ***LOGIN*** appears.

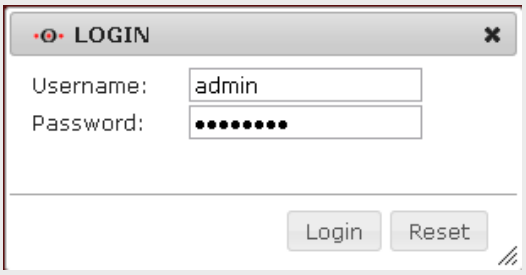


fig. 6 Login dialog

- At the field ***Username*** insert *admin*.
- At the field ***Password*** insert *insecure* or the new password, if you change it during the installation process.
- After this click ***Login***.
- You will be logged on to the system and the start screen appears.

Note: Change your password as quickly as possible. Use the navigation bar icon ***Authentication***, item ***Users***.
Use upper- and lowercase characters, numerals and special characters. Your password should be eight characters long.

4.2 System Requirements for Client Computer

- Operating system: MS Windows XP and higher or Linux
- Processor: Pentium 4 with 1.8 GHz and higher or according
- Memory: 512 MB or more
- Browser: preferably MS Internet Explorer 7 and Mozilla Firefox 3

5 Securepoint Cockpit

The first screen shown after login to the trusted area displays an overview of the hardware and services status. Besides it contains the navigation bar, information of the license, active connections and available downloads.

This view is always open. All further configuration options and settings will be conducted in popup windows. After editing the settings, the popup windows will be closed and the cockpit in the background will be activated again.

The lists in the cockpit can be closed to managie the display for your needs.

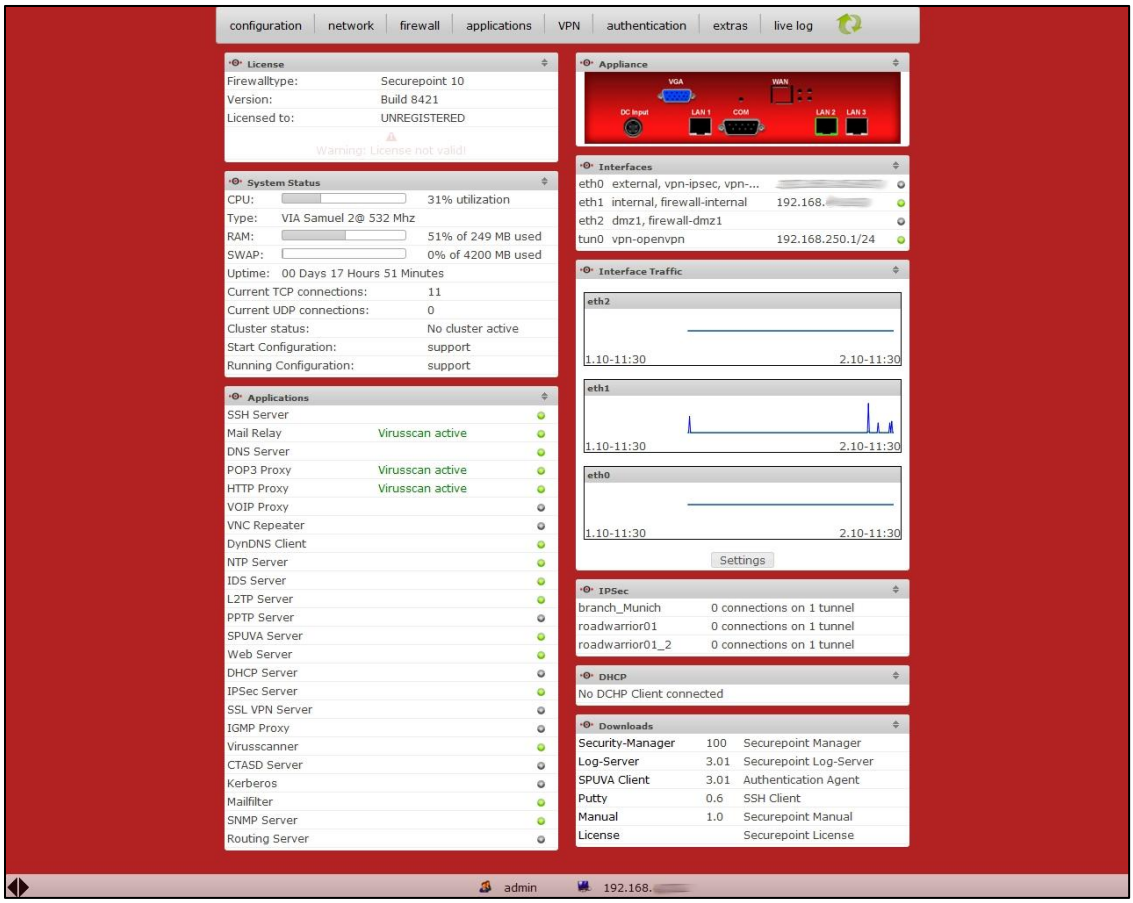


fig. 7 cockpit overview

5.1 Navigation Bar

The navigation bar guides you to the different configuration categories. These categories are: ***configuration***, ***network***, ***firewall***, ***applications***, ***VPN***, ***authentication***, ***extras***, ***live log***

Moving the mouse over the entry opens the respective dropdown menu.

fig. 8 navigation bar of the cockpit

5.2 License

In this area you have an overlook of the firewall software, updates and license.

name	description
Firewall Type	Name of the firewall software
Version	Version of the firewall software
Licensed to	Name, and if applicable, company of the license owner.
License valid till	Validation of the license The date is given in US American format: MM/DD/YYYY
Last Virus Pattern update	Time of the last virus pattern update.

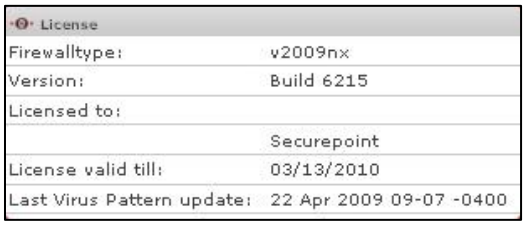


fig. 9 licence area

5.3 System

In this area the current system utilization and the number of active TCP / UDP connections are shown.

name	description
CPU	Utilization of the processor
Type	Type of processor
RAM	Utilization of the memory graphical and in percentage
SWAP	Utilization of the swap file graphical and in percentage
Uptime	How long the system is running since the last reboot.
Current TCP Connections	Number of current TCP connections
Current UDP Connections	Number of current UDP connections
Start Configuration	Name of the start configuration
Running Configuration	Name of the running configuration

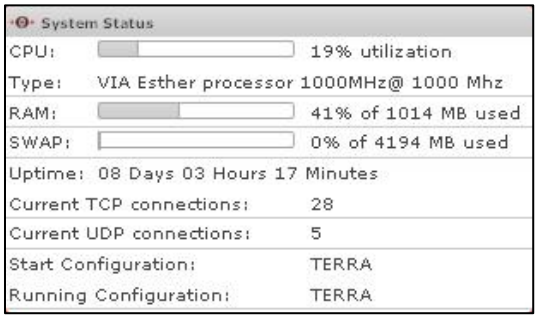

System Status
CPU: 19% utilization
Type: VIA Esther processor 1000MHz@ 1000 Mhz
RAM: 41% of 1014 MB used
SWAP: 0% of 4194 MB used
Uptime: 08 Days 03 Hours 17 Minutes
Current TCP connections: 28
Current UDP connections: 5
Start Configuration: TERRA
Running Configuration: TERRA

fig. 10 system status

5.4 Service Status

The table shows a list of all available services and their status. Next to the HTTP proxy, POP3 proxy and Mail Relay services is shown the state of the virus scanning.
An active service is illustrated by a green circle. A grey circle shows that the service is inactive.

service	description
SSH Server	Secure Shell Allows an encrypted connection to the appliance.
Mail Relay	Service for sending e-mail.
DNS Server	Domain Name System Server Hostname to IP-address resolution
POP3 Proxy	Post Office Protocol Version 3 Proxy Establishes a connection to a POP3 server and tests the received e-mails for viruses and spam.
HTTP Proxy	Hypertext Transfer Protocol Proxy The proxy interconnects the client of the internal network with the server in the internet. It can block HTTP requests by means of content and it can test websites for viruses.
VoIP Proxy	Voice over IP Proxy Offers internet telephony.
VNC Repeater	Virtual Network Computing Offers to control a remote computer.
DynDNS Client	Dynamic Domain Name Services Client The client updates the current IP of the firewall by a DynDNS service.
NTP Server	Network Time Protocol Server Synchronizes all system clocks in the network.
IDS Server	Intrusion Detection System Server Protects the network against know intrusions
L2TP Server	Layer 2 Tunneling Protocol Server Offers VPN connections to the firewall by using the network protocol L2TP.
PPTP Server	Point To Point Tunneling Protocol Server Offers VPN connections to the firewall by using the network protocol PPTP.

SPUVA Server	Wortmann Security User Verification Agent Server Central user authentication
Web Server	Dynamic Host Configuration Protocol Server Allocates network configurations to the computer in the network (for example the IP-address).
DHCP Server	Internet Protocol Security Server Offers VPN connections to the firewall by using the IPSec protocol.
IPSec Server	Layer 2 Tunneling Protocol Server Offers VPN connections to the firewall by using the network protocol L2TP.
SSL VPN Server	Secure Socket Layer Virtual Private Network Server Offers SSL secured VPN connections to the firewall.
IGMP Proxy	Internet Group Management Protocol Offers the spreading of packets to multiple recipients.
Virusscanner	Virus scan service for POP3 and HTTP.
CTASD Server	Commtouch Anti Spam Daemon Service for spam identification from the company Commtouch.
Kerberos	The Kerberos authentication service authorizes the access of the HTTP proxy.
Mailfilter	Scans e-mails for spam and undesired attachments.
SNMP Server	Simple Network Monitoring Protocol Reads the values of interface traffic, processor- and memory utilization.
Routing Server	Supports several routing protocols.

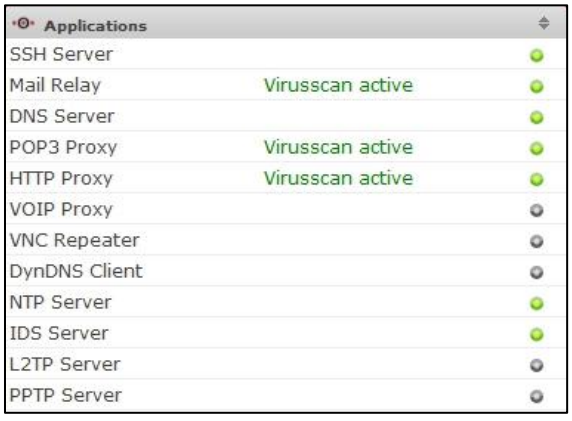


fig. 11 service status (part 1)

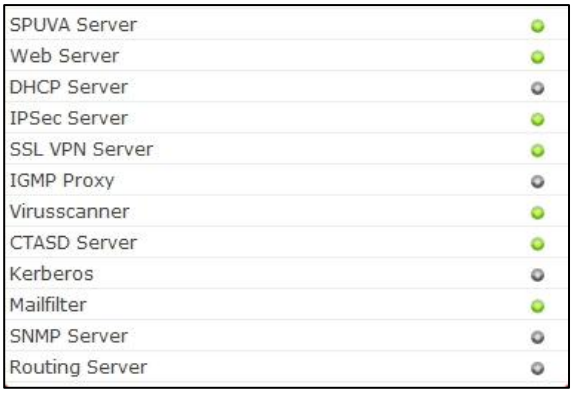


fig. 12 service status (part 2)

5.5 Appliance

Displays the view of the appliance.

The connected LAN ports are marked green.

fig. 13 view of the appliance (for example a Piranja)

5.6 Interfaces

In this area the interface in listed with the assigned IP-addresses and zones. Depending on the used appliance more interfaces (eth*x*) are shown.

name	description
eth0	Ethernet adapter for connection to the internet. At the appliance indicated as LAN 1.
eth1	Ethernet adapter for connection to the internal Network. At the appliance indicated as LAN 2.
eth2	Ethernet adapter to attach a demilitarized zone (DMZ). At the appliance indicated as LAN 3.
ppp0	A virtual interface to connect the firewall to the internet with PPPOE. Will be bound to eth0.
tun0	Virtual interface for the SSL VPN. The internal address is set to 192.168.250.1 by default.

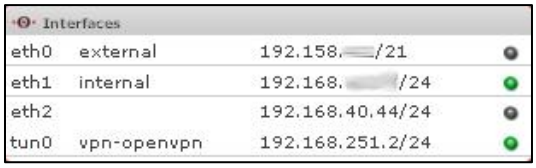


fig. 14 status of interfaces

5.7 IPSec

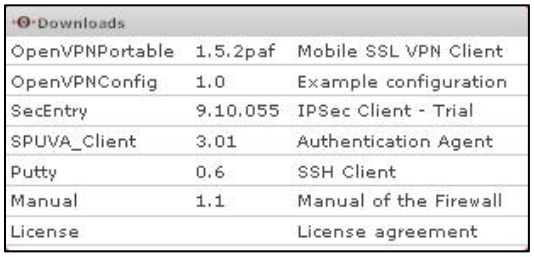
The created IPSec connections and their usage are listed in this section.
Ahead stands the name of the connection followed by the current usage.

IPSec	
branch_Munich	0 connections on 1 tunnel
roadwarrior01	0 connections on 1 tunnel
roadwarrior01_2	0 connections on 1 tunnel

fig. 15 list and status of IPSec connections

5.8 Downloads

In this table are listed, which files are available in the download section of the user interface.
Furthermore the version and a short description are shown.
The filename is a hyperlink which you can use to download the file directly.

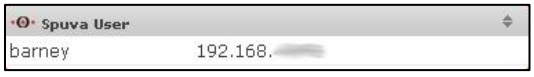


Downloads		
OpenVPNPortable	1.5.2paf	Mobile SSL VPN Client
OpenVPNConfig	1.0	Example configuration
SecEntry	9.10.055	IPSec Client - Trial
SPUVA_Client	3.01	Authentication Agent
Putty	0.6	SSH Client
Manual	1.1	Manual of the Firewall
License		License agreement

fig. 16 available downloads in the user interface

5.9 Spuva User

This table lists the users and their IP address, which have signed in via SPUVA (Securepoint User VerificationAgent).
The SPUVA gives users individual rights on computers in the DHCP environment. The user authenticates against SPUVA and gets an individual Security Policy for any workstation in the network. If the user changes his workplace, he will get the same Security Policy at the new workplace automatically.



Spuva User	
barney	192.168.

fig. 17 user barney is conneted via SPUVA

5.10 SSH User

This section shows, which user has connected the appliance via SSH (Secure Shell for example by the program PuTTY).
Login name and IP address of the user are shown. Also the time of the login is listed.

fig. 18 users, which are logged on via SSH

5.11 Web Interface User

Shows a list of user, which are logged on the web interface. The login name and the IP address of the user are shown. Also the time of the login is listed.
The table lists users at the administration interface and the user interface.

fig. 19 users, which are logged on the administration or user interface

5.12 DHCP Lease

The DHCP (Dynamic Host Configuration Protocol) server assigns dynamic IP addresses to the user of the internal network, if this service is activated. This IP address is reserved for the user for a defined time. In this section the reserved addresses are listed with the user name and the MAC address of the computer. The last column shows the status. A grey dot means that the user is offline. A green dot means that the user is currently logged on.
The table always contains ten rows. If more DHCP addresses are stored, you can leaf through the pages with the arrow button at the bottom.

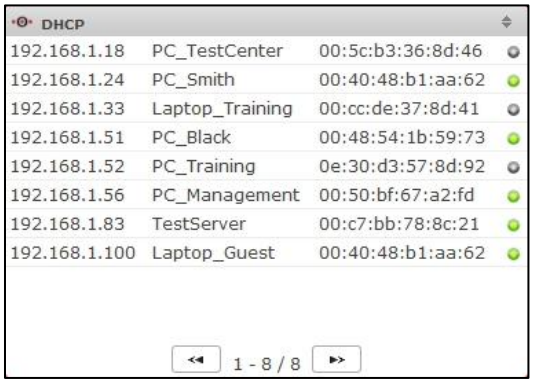


fig. 20 stored DHCP addresses

5.13 Interface Traffic

The display ***Internet Traffic*** shows the data traffic of the interfaces graphically. The incomming traffic is shown as a green and the outgoing traffic as a blue graph. The represented time period is the last 24 hours. The measurement is taken every 5 minutes.

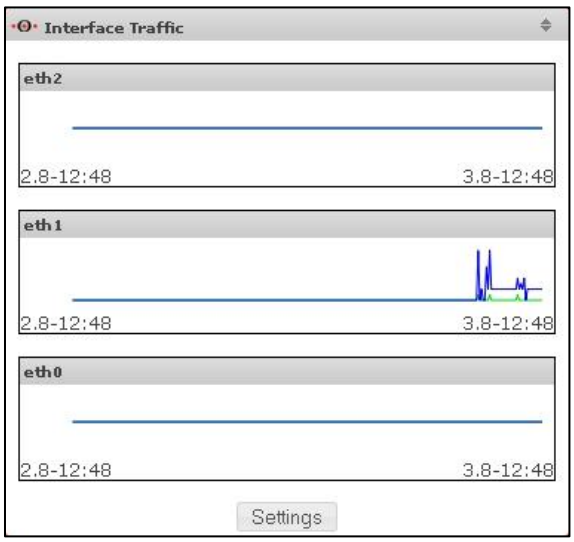


fig. 21 graphical display of the data traffic

5.13.1 Traffic Settings

With the button Settings your can configure, which interfaces are displayed in this area. The dialog Interface Traffic Settings shows two lists. The left one shows the available interfaces and the right one the interfaces which are displayed in the cockpit. Highlight an interface and use the arrow buttons to move it to the desired list.

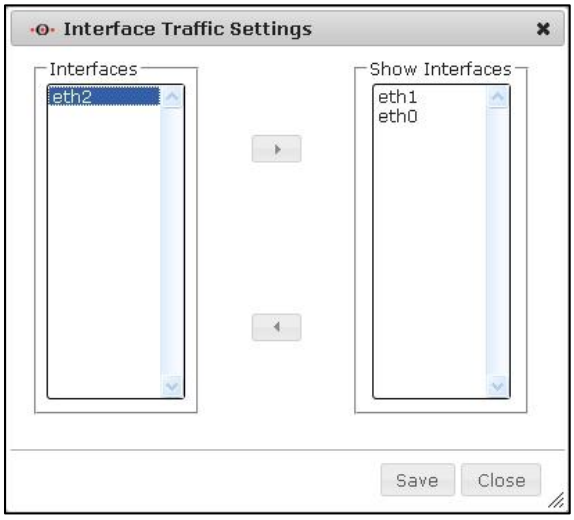


fig. 22 available and displayed interfaces

5.13.2 Traffic Details und Traffic Zoom

A click onto a diagram opens a new window, which shows the graph in higher resolution. It also shows details of the traffic.

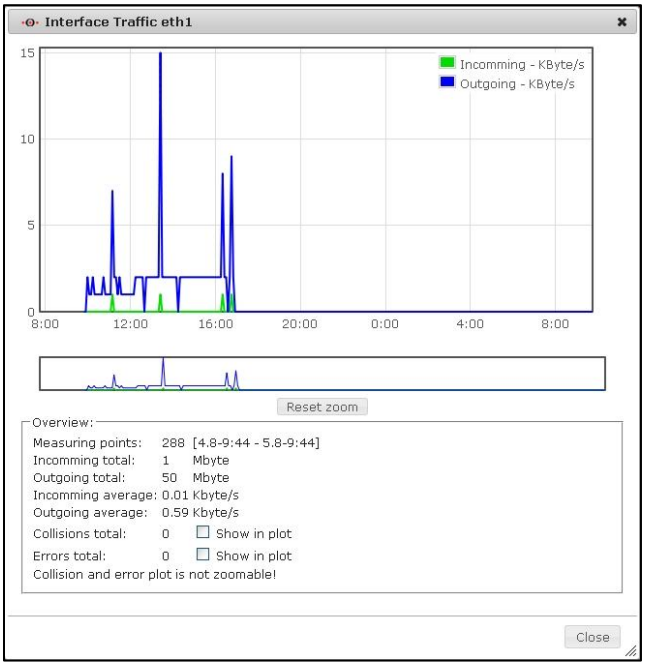


fig. 23 details of the data traffic of the interface eth1

You can enlarge a section of the graph by raising a selection rectangle in the lower diagram. You can reset the selection by clicking ***Reset Zoom***.

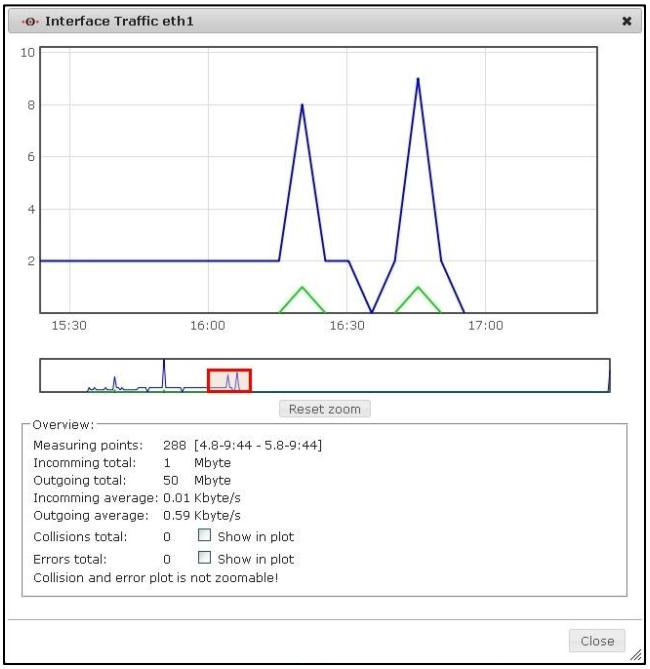


fig. 24 enlarged section

5.14 Show Help

In the title bar of the dialogs you can find a questionark symbol right beneath the close button. Press this symbol to open the help. The shown text comments the settings, which have to be set in the dialog. This function is context sensitive and only describes the relative dialog.

fig. 25 help symbol in the title bar

5.15 Administrator IP

At the bottom of the web browser window the user name and the IP-address of the logged on administrator are shown.
A click on the double arrow in the lower left corner hides or shows the bar.

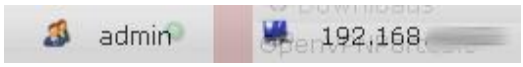


fig. 26 name and IP-address of the logged on user

fig. 27 hides or shows the data

5.16 Refresh

At the right side of the navigation bar you will find the button ***Refresh Cockpit***.
With this button you can reload the website.

fig. 28 reloads the cockpit

6 Menu Configuration

All settings of the appliance are stored in a configuration file.
Commands which are related to the configuration and basic system commands are deposited in the menu item ***configuration***.

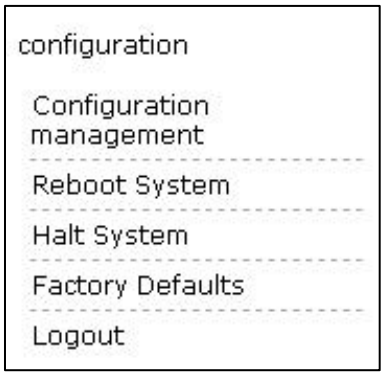


fig. 29 dropdown menu of the menu item configuration

name	description
Configuration management	The configuration management shows a list of all saved configuration files. Here you can export, print or delete the configuration. Furthermore you can load and import configurations, set a start configuration or save current settings in a new file.
Reboot System	Stops the system and starts it again.
Halt System	Stops the system but doesn't restart it.
Factory Defaults	Reset the appliance to factory settings.
Logout	Log out of the system.

6.1 Configuration Management

All settings of the firewall are stored in a configuration file. The menu item ***Configuration management*** of the menu ***configuration*** shows a list of all saved configurations.

> ➢ Choose the menu ***configuration*** in the navigation bar and select the point ***Configuration management*** from the dropdown menu.
> The dialog ***Configurations*** appears.

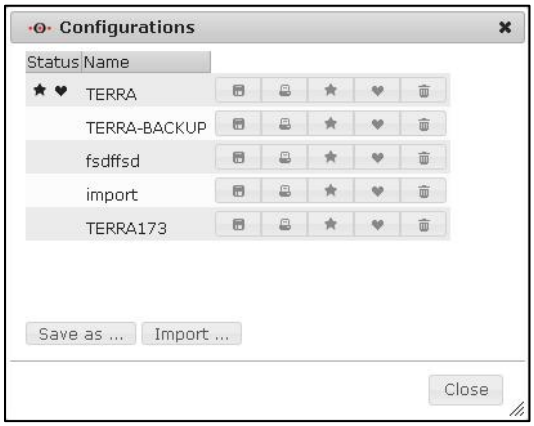


fig. 30 list of available configurations

The start configuration is labled with an asterisk ahead of the configuration name. This configuration is loaded when the appliance is turned on (for example after reboot).
The heart symbol labels the current running configuration.
The signs behind the configuration names are buttons for functions which can be used for every configuration.
The buttons ***Save as …*** and ***Import …*** are located below the list.

button	function	description
	export	Exports the configuration and saves it in DAT format.
	print	Opens a browser window in which the configuration is shown in table format. This description can be printed or saved.
	start conf.	Set the configuration to start configuration.
	load	Loads the configuration.
	delete	Deletes the configuration.
	description	Opens a browser window in which a description of the configuration can be typed.

6.1.1 Save Configuration

The settings made will be stored automatically in the current running configuration. You can also save the new settings in an existing configuration or in a new one.

- Click on the button ***Save as …*** .
  The dialog ***Save as …*** appears.
- Select an existing configuration from the dropdown box or enter a new name for the configuration.
- Click on ***Save***.

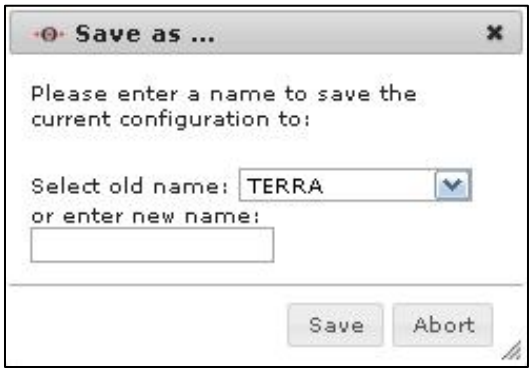


fig. 31 save the configuration

6.1.2 Import configuration

You can import an existing configuration. The function requires that the external file must be saved in DAT format.

- Click on the button ***Import …*** .
  The dialog ***Import configuration …*** appears.
- Click on ***browse*** and select the designated file.
- After that click ***Import***.
  The configuration will be stored on the application.

fig. 32 import external configuration

6.2 Reboot System

The second point of the dropdown menu restarts the appliance. After reboot the start configuration will be loaded. If no configuration is set as a start configuration, you have to set one before the reboot.

6.3 Halt System

This point stops the system. The system will neither be rebooted nor new shuted down

6.4 Factory Defaults

Reset the system to factory settings.

Note: The reset will delete all configurations.

6.5 Logout

Click on this button to log out of the system. The appearance of the administration interface will be stored for each user on every logout.

7 Menu Network

Network settings like IP-addresses of the interfaces, DSL access data etc. are set here. Further on you can download updates and apply the license file in this section.

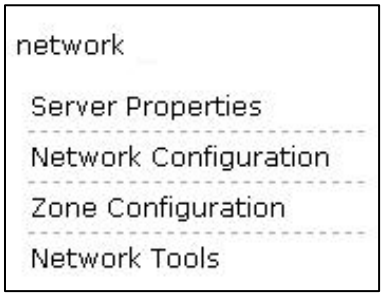


fig. 33 dropdown menu of the menu item network

name	description
Server Properties	Appliance basic settings: Administrator IP-addresses, time zone and log server IP-address
Network Configuration	Network settings Setting of IP-addresses and subnets of interfaces, DSL connection, DynDNS service, routing and DHCP server
Zone Configuration	Assign interfaces to zones and create new zones.
Network Tools	Tools: Lookup, Ping and lists the routing table

7.1 Server Properties

In this section basic settings for the appliance will be set. The dialog contains the tabs ***Server Settings***, ***Administration***, ***Syslog*** and ***Cluster Settings***.

7.1.1 Server Settings

On this tab you can set the appliance name, the Domain Name Service server and the Network Time Protocol server.

- Enter the domain name of the firewall into the field ***Servername***.
- Enter the IP-address of the Domain Name Service server into the field ***Primary Nameserver***.
  If you use a second name server enter its IP-address into the field ***Secondary Nameserver***.
- Enter the IP-adress or the host name of a time server into the filed ***NTP Server*** and select your time zone in the dropdown box ***Timezone***.
- You can limit the numbers of TCP/IP connections. The number must range between 16,000 and 2,000,000. Enter the number into the field ***Maximum number of active connections***.
- Select from the dropdown box ***Last-Rule-Logging*** the protocol accuracy for dropped packets.

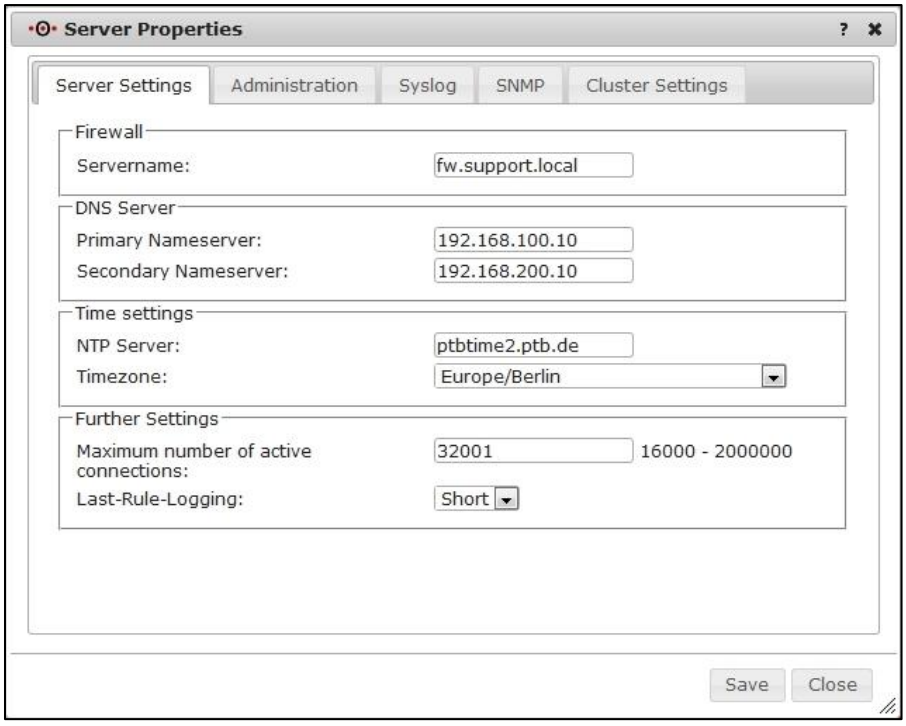


fig. 34 tab Server Settings

7.1.2 Administration

The administration access to the appliance is only allowed from the internal net by default. In this tab you can define which IP-addresses and subnets the appliance can be administrated from.

- To add an IP-address or a net, click the button ***Add Host/Net***.
  The dialog ***Add Host/IP*** appears.
- Enter a host name or an IP-address.
  If you want to allow the access for a subnet, you have to use the bitcount notation.
  For example: 192.168.176.0/24
- Click ***Add***.
- You can delete entries in the list by clicking the ***trash can icon*** beneath the entry.

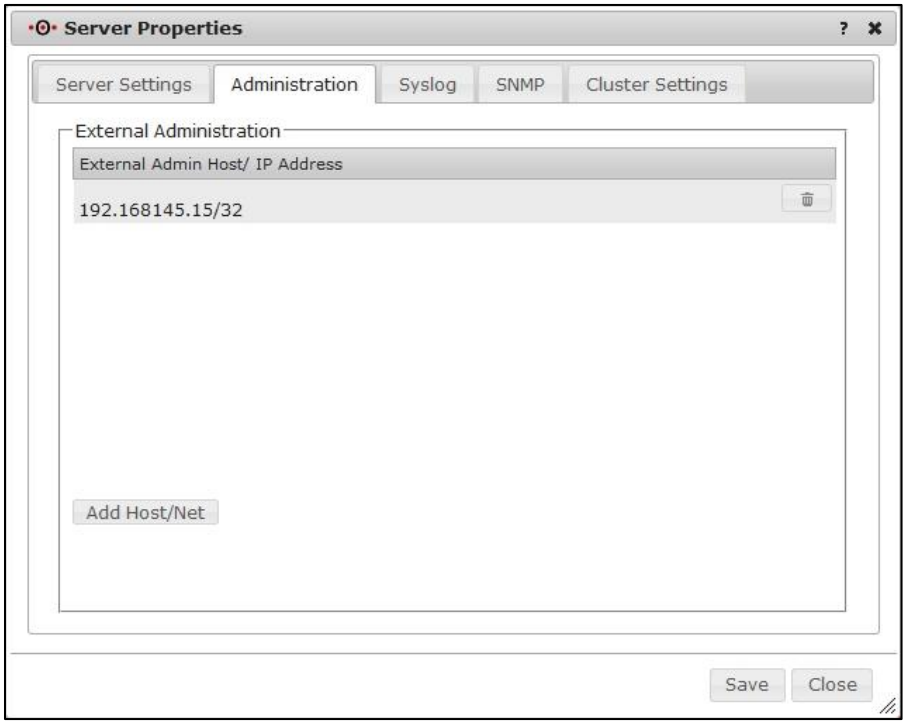


fig. 35 tab Administration for external administration

7.1.3 Syslog

In the portfilter of the appliance the administrator can define whether the use of a rule is logged and in which grade of accuracy. The logging data in Syslog format can be stored on a server. So you can analyse logging data at a later time.

- To add a server for protocol data click on ***Add Syslog Server***.
  The dialog ***Add Syslog Server*** appears.
- Enter the IP-address or the host name into the input field and click ***Add***.
- You can delete a server in the list by clicking the ***trash can icon*** beneath the entry.

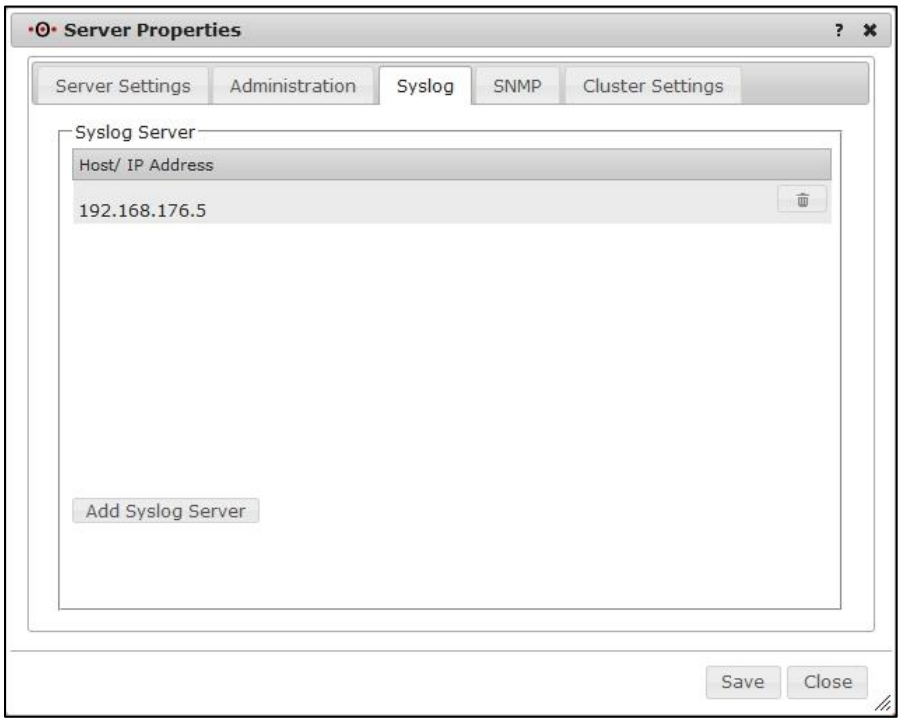


fig. 36 tab syslog of the Server Settings dialog

7.1.4 SNMP

The Simple Network Management Protocol (SNMP) is a network protocol to control network devices centraly. With this protocol you can read the values of interface traffic, processor- and memory utilization.
The versions 1 and 2c are supported.
The remote computer must be set as an authorized host to read the data. Furthermore a SNMP client and the SNMP service must be installed on the remote computer. The host must also know the Community String.

- Activate the SNMP ***Version***, you want to support. You can support both versions at the same time.
- Set a keyword into the field ***Community String***. Advice the remote user of this keyword.
- At the bottom of the section ***Enable access from networks*** enter an IP address you want to allow the access via SNMP.
  Select the wanted subnetmask and click ***Add network***.
  The IP-address is appended to the table.
- To allow the access, you have to reate an according rule in the portfilter.

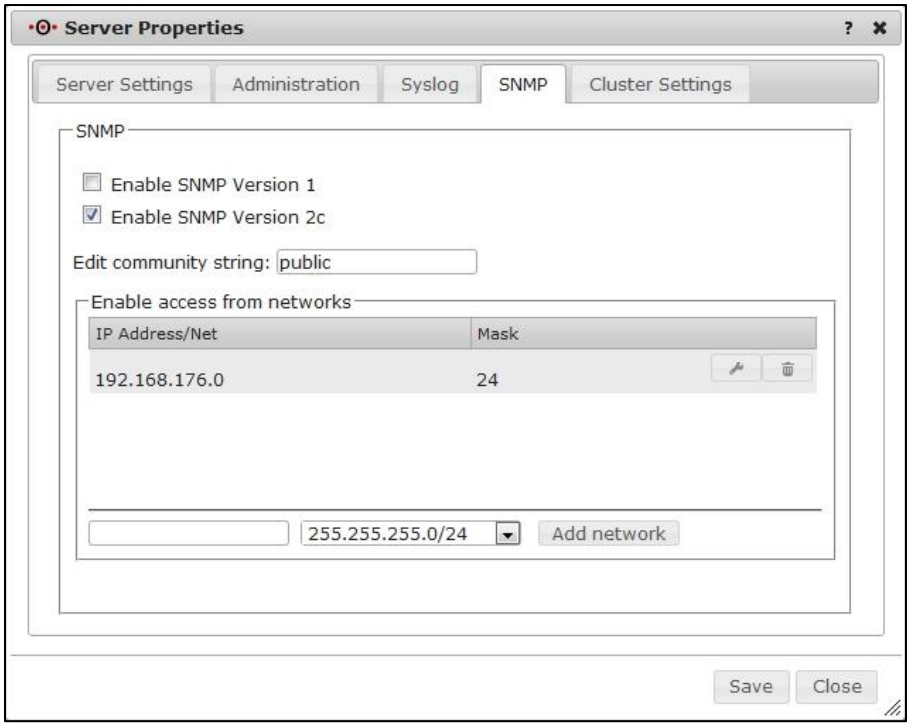


fig. 37 tab SNMP

7.1.5 Monitor Agent (AmdoSoft v4 Agent)

The Securepoint firewall can be monitored and maintained by the controller software of the company AmdoSoft Systems. The firewall connects to the registered AmdoSoft controller in the internal or external network. The controller software for the automatic monitoring has to be purchased from the company AmdoSoft Systems.
It is no rule necessary for this data traffic.

- Go to the point ***Network*** on the navigationbar and click on the entry ***Server Properties*** in the dropdownmenu.
- In the dialog ***Server Properties*** switch to the tab ***Monitoring Agent***.
- Enter the IP address of the computer where the AmdoSoft Controller software is installed into the the field ***b4 Conroller IP***.
- Afterward click ***Save***.

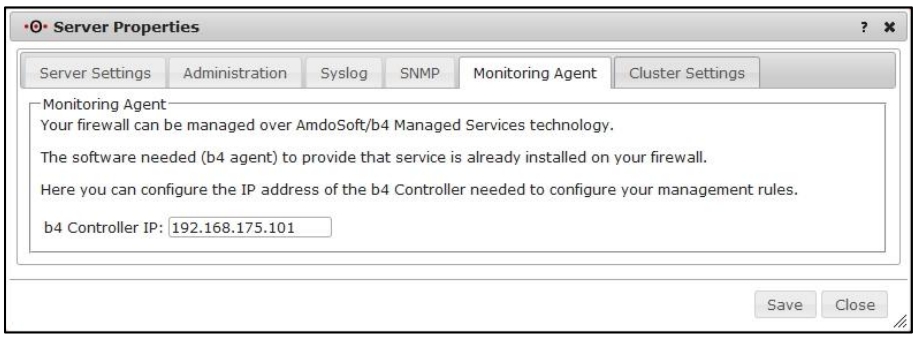

Server Properties
Server Settings
Administration
Syslog
SNMP
Monitoring Agent
Cluster Settings
Monitoring Agent
Your firewall can be managed over AmdoSoft/b4 Managed Services technology.
The software needed (b4 agent) to provide that service is already installed on your firewall.
Here you can configure the IP address of the b4 Controller needed to configure your management rules.
b4 Controller IP: 192.168.175.101
Save
Close

fig. 38 tab Monitor Agent

7.1.6 Cluster Settings

The Securepoint appliance offers the option to set up a high availability environment. For the environment you need at least two appliances. One firewall will be used as active machine (mMaster) and the other one (or more) as backup machine (slave) in standby. If a requisite service or the complete master crashes, the slave machine assumes the control.

- Define the range (in seconds) between the status messages of the master to the slave in the field ***Delay between advertisment packets***.
- Decide how many messages may be missing, before the master is detected as crashed. Type the number in the second field.
- Enter a number into the field ***Cluster ID***, to identify the cluster formation.
- Enter a keyword for the encryption of the status messages into the field ***Cluster Secret***.
- The option ***Switch to master if possible*** sets the appliance as master if it goes back on stream.
- The ***Host Status*** can be ***offline***, ***master*** or ***slave***.
  If the status has the value master, the appliance can be made to spare with the button ***Downgrade to spare***. A machine with slave status becomes the master.

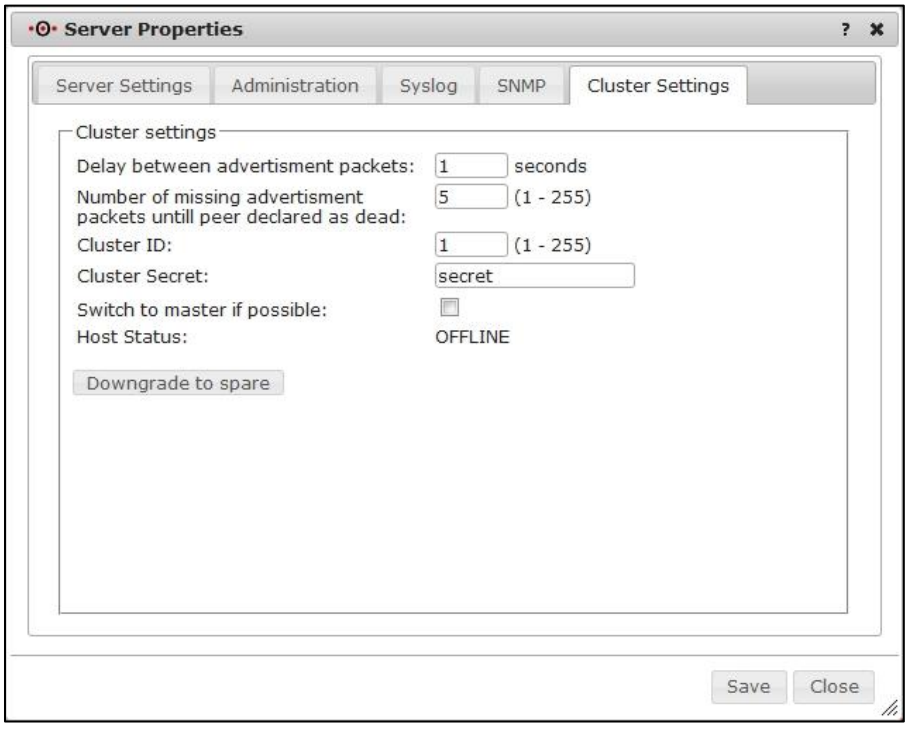


fig. 39 tab Cluster Settings

7.2 Network Configuration

In this area the settings for the network have to be defined. This contains the IP-addresses of the several interfaces, entries in the routing table, access data of the internet service provider, maybe data of a dynamic address service and settings ot the DHCP server.

7.2.1 Interfaces

The tab Interfaces shows a list of all available interfaces with the related IP-address and zone.

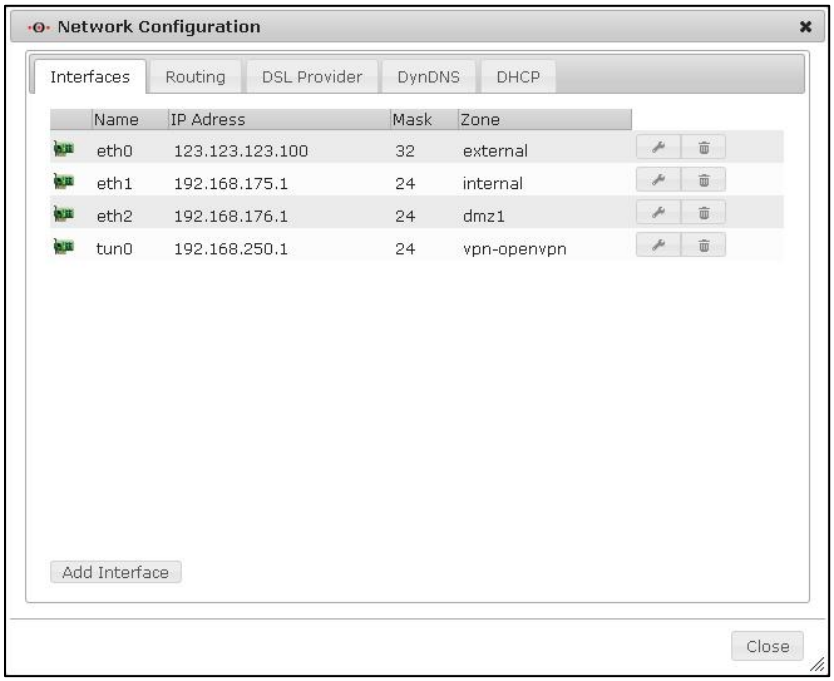


fig. 40 list of available interfaces

The name of the interface is depending on it´s usage. Interfaces with the same name are numbered serially from 1 to n.

usage	labeling
ethernet	eth0, eth1, eth2, eth3, eth4 ... ethn
virtual network	eth0.0; eth0.1 … eth0.n .ethn.0; ethn.1… ethn.n (virtual address is bonded to real interface)
ADSL and VDSL	ppp0, ppp1… pppn
high availability environment	cluster0, cluster1, cluster2… clustern (virtual address is bonded to real interface)
OpenVPN	tun0, tun1, tun2… tunn (virtual interface)

The minimum of three interfaces are ethernet interfaces with the name eth0, eth1 and eth2. Furthermore one virtual interface tun0 is predefined with the address 192.168.250.1

fig. 41 select the interface typ

7.2.1.1 Add eth Interface

- Click ***Add Interface***.
  The ***Interface Wizard*** appears.
- Select the desired interface type (in this case ***eth***).
- Click ***Next***.
  The configuration window of ***eth Interface*** appears.
- In the section ***General*** you have to set the properties of the interface.
  The name of the interface is set automatically and cannot be changed.
- Enter the IP-address of the interface into the field ***IP***.
- Select the subnet mask in the field ***Mask***.
- If the DHCP server should assign an IP-address to this interface, activate the check-box ***DHCP Client***.
- You can define the maximum packet size in the field ***MTU*** (Maximum Transmission Unit). Usually you can leave the default value (1500).
- If the interface should answer to pings, activate the checkbox ***Allow Ping***.
- Select the speed of the interface from the dropdown field ***Speed***.
- In the right section select the zone of the interface and the related zone(s) and acti-vate the relevant checkboxes.
- Complete the configuration with ***Finish***.
- After the interface is added you have the press the button ***Update Interface***.

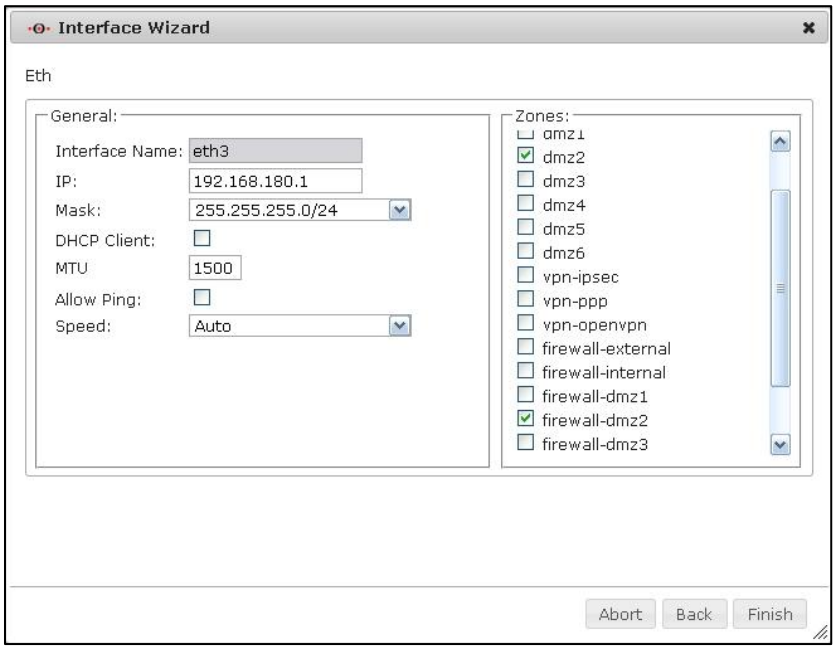


fig. 42 add eth interface - define settings

7.2.1.2 Add VLAN Interface

VLAN means Virtual Local Area Network and is used to divide a physical network into serveral logical nets. Several networks kann be used to structure the whole intranet. You can split the network by organization into units, groups or by spatial properties like floor or buildings.

Actually you need one interface for every network. VLAN interfaces of the appliance are virtual interfaces that are bound to one physical interface. So you can conduct all virtual LANs at one interface. Every VLAN has an ID, which is append at the packets as a tag. On the basis of thee tags, a VLAN supporting switch can direct to packets to the right VLAN.

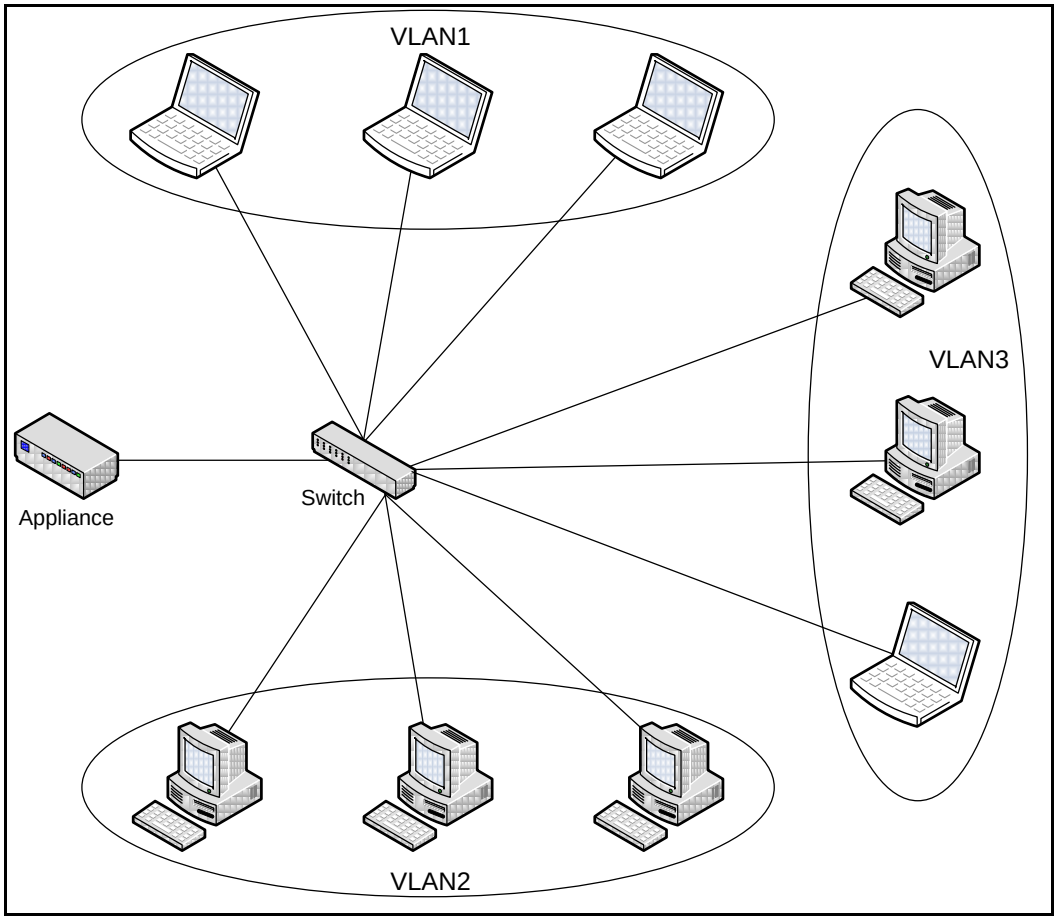


fig. 43 VLAN formation

- Click ***Add Interface***.
  The ***Interface Wizard*** appears.
- Select the desired interface type (in this case ***VLAN***).
- Click ***Next***.
  The configuration window of ***VLAN Interface*** appears.
- Select in the field ***Interface*** to which physical Interface the VLAN interface should be bound to.
- Enter an ID for the interface in the field ***VLAN ID***.
- Enter an ***IP*** and ***Mask*** the IP-address and the subnet mask of the VLAN network.
- Select if an IP-address will be assigned to the interface by the DHCP server. If so, activate the checkbox ***DHCP Client***.
- Define the maximum size of a data packet and enter the value in the field ***MTU*** (Maximum Transmission Unit). In normal case you can leave the default value (1500).
- If the interface should answer pings, activate the checkbox ***Allow Ping***.
- Select the speed of the interface from the dropdown field ***Speed***.
- Select the zone of the interface and the related zones by activating the relevant checkboxes at the right side.
- Complete the configuration with ***Finish***.
- After the interface is added you have to press the button ***Update Interface***.

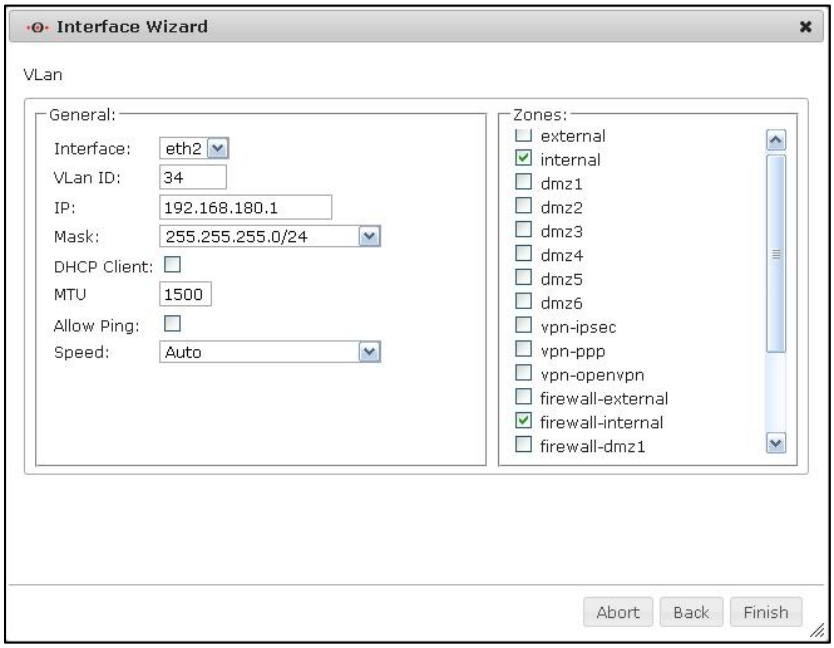


fig. 44 add VLAN interface - set properties

7.2.1.3 Add PPTP interface

A PPTP interface is used for connecting the internet by Point to Point Tunneling Protocol.

This protocol is primarily used in Austria.

- Click ***Add Interface***.
  The ***Interface Wizard*** appears.
- Select the desired interface type (in this case ***PPTP***).
- Click ***Next***.
  The configuration window of ***PPTP Interface*** appears.
- Select in the field ***Interface*** to which physical Interface the PPTP interface should be bound to. This should be the external interface. It will be replaced by the PPTP interface after completion.
- Enter an ***Local Ethernet IP Address*** and ***Mask*** the IP-address and the subnet mask of the interface.
- The field ***Modem IP Address*** expects the IP-address, which is assigned to you by the internet service provider.
- Select a provider from the dropdown field ***DSL-Provider***, which is used to connect the internet.
  If you did not create a DSL provider yet, select the entry ***new*** and add a provider. Enter the required data into the fields ***Provider Name***, ***Username*** and ***Password***.
- Click ***Finish*** to complete the configuration.
- After the interface is added, you have to press the button ***Update Interface***.

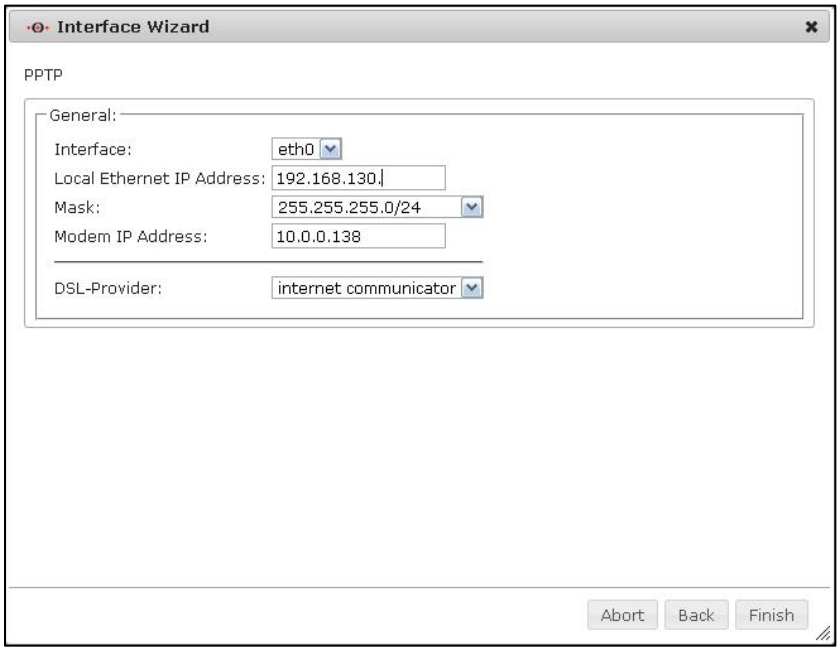


fig. 45 add PPTP interface - set properties

7.2.1.4 Add PPPoE Interface

A PPPoE interface is used for connecting the internet by Point to Point Protocol over Ethernet. This protocol is commony used in Germany.

- Click ***Add Interface***.
  The ***Interface Wizard*** appears.
- Select the desired interface type (in this case ***PPPoE***).
- Click ***Next***.
  The configuration window of ***PPPoE Interface*** appears.
- Select in the field ***Interface*** to which physical Interface the PPPoE interface should be bound. This should be the external interface. It will be replaced by the ppp interface after completion.
- Select a provider from the dropdown field ***DSL-Provider***, which is used to connect the internet.
  If you did not create a DSL provider yet, select the entry ***new*** to add a provider. Enter the required data into the fields ***Provider Name***, ***Username*** and ***Password***.
- Click ***Finish*** to complete the configuration.
- After the interface is added you have to press the button ***Update Interface***.

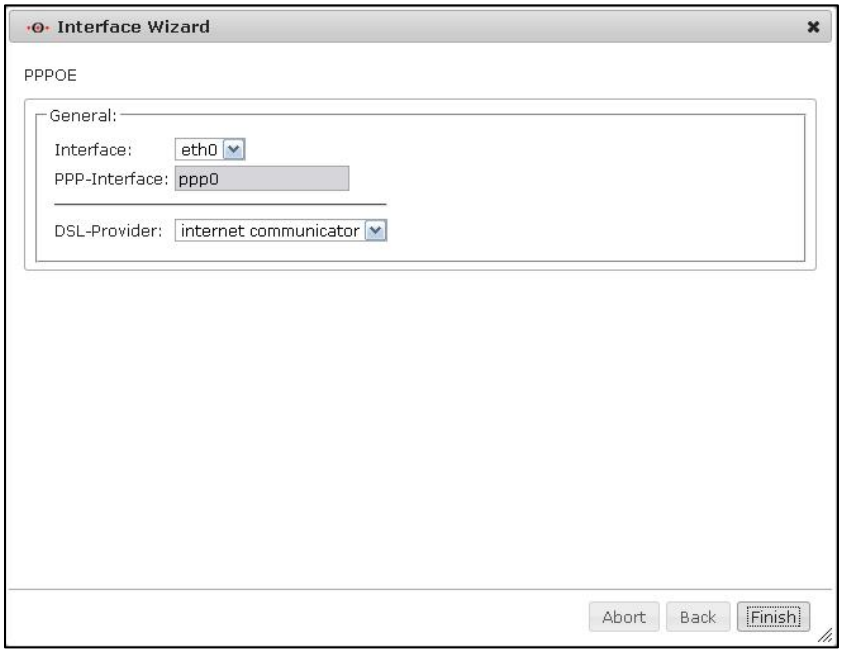


fig. 46 add PPPoE interface - set properties

7.2.1.5 VDSL Interface hinzufügen

VDSL stands for Very High Speed Digital Subscriber Line and is an internet connection with great transfer rates.

- Click ***Add Interface***.
  The ***Interface Wizard*** appears.
- Select the desired interface type (in this case ***VDSL***).
- Click ***Next***.
  The configuration window of ***VDSL Interface*** appears.
- Select in the field ***ETH Interface*** to which physical Interface the VDSL interface should be bound. This should be the external interface.
- Select a ***VLAN ID*** for the Interface. At completion an eth interface will be created with the selected ID (for example eth0.7).
- In the field ***VDSL-Interface*** a name is predetermined.
- Select a provider from the dropdown field ***DSL-Provider***, which is used to connect the internet.
  If you did not create a DSL provider yet, select the entry ***new*** to add a provider. Enter the required data into the fields ***Provider Name***, ***Username*** and ***Password***.
- Click ***Finish*** to complete the configuration.
- After the interface is added you have to press the button ***Update Interface***.

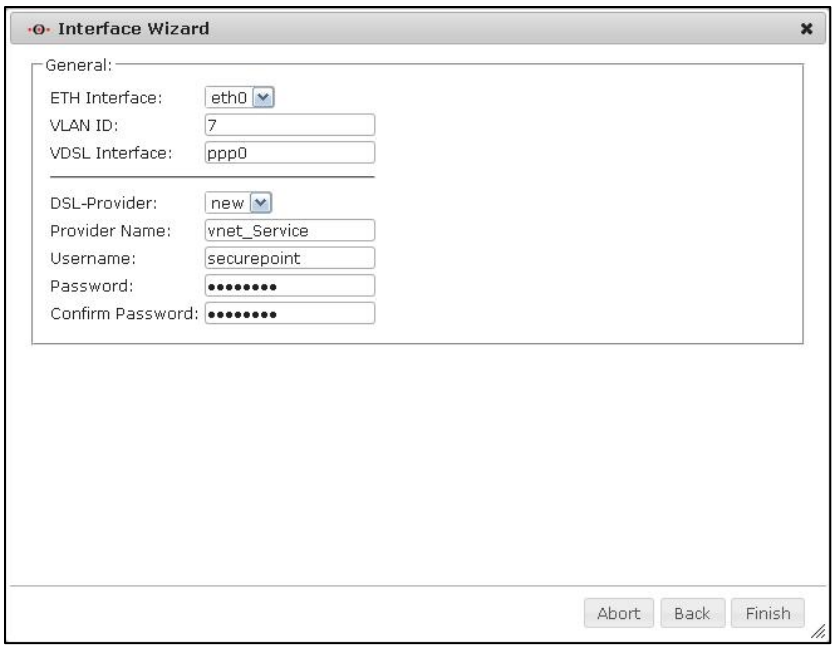


fig. 47 add VDSL interface - set properties

7.2.1.6 Add Cluster Interface

The cluster interface is needed to set up a high availability environment.

Two (or more) appliances are required to adjust this setup. One appliance acts in active state as master and the other appliances are waiting in stand-by mode as spare. If important services cannot be provided by the active machine or the whole machine breaks down, the other appliance wakes op from stand-by and assumes the service as master.

The cluster interface binds a virtual and a “real” IP-address to a physical interface. The especialness of the high availability bond is that all appliances get the same virtual IP-addresses. Because the redundant machines are running in standby mode and their cluster IPs are not up, there will be no IP-address conflict. The “real” IP-addreses (so called management IPs) are used to send advertisement packages in terms of their status between the appliances.

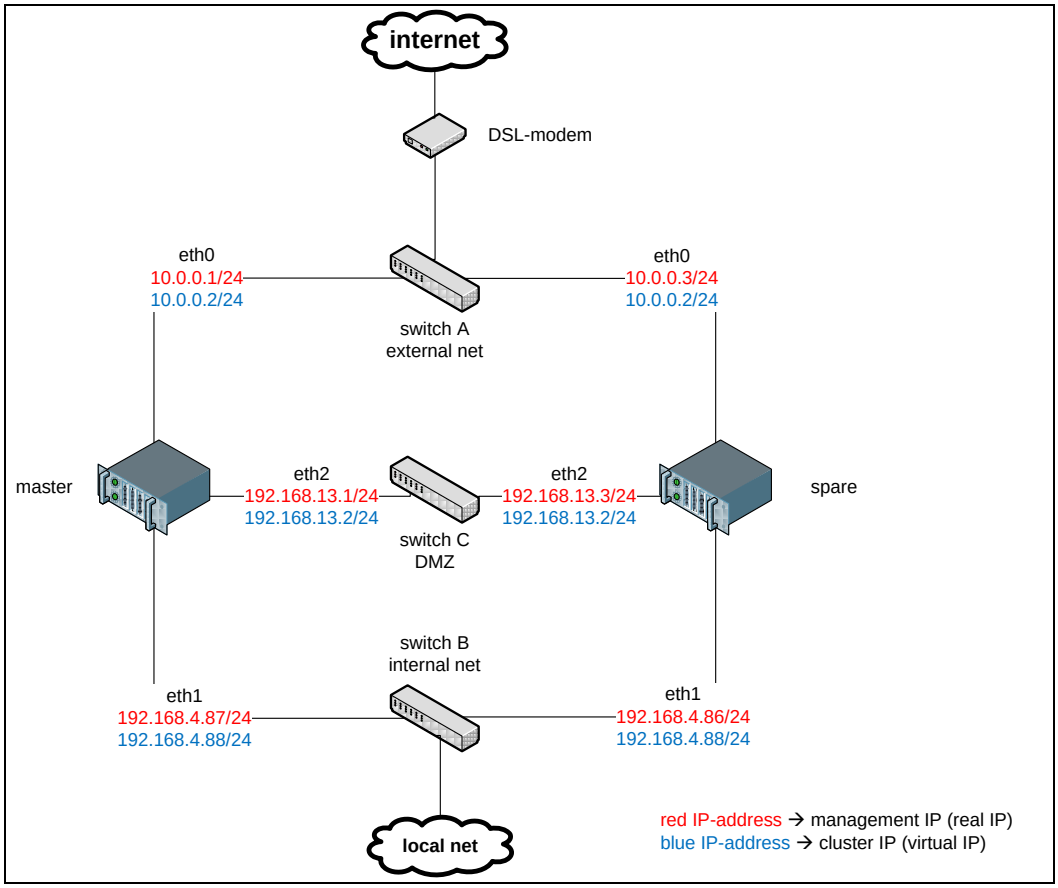


fig. 48 high availibility environment

- Click ***Add Interface***.
  The ***Interface Wizard*** appears.
- Select the desired interface type (in this case ***Cluster***).
- Click ***Next***.
  The configuration window of ***Cluster Interface*** appears.
- Select in the field ***Interface*** to which physical Interface the cluster interface should be bound to. The physical interface persists to support the management IP-address.
- In the field ***Cluster-Interface*** a name is predetermined.
- Insert the virtual IP-address of the appliance in the field ***Cluster-IP***.
- Enter the subnet mask into the field ***Mask***.
- In the section ***Spare IPs*** enter the management ***IP-address(es)*** of the spare machine(s).
- Type the IP-address and the related subnet macks into the fields ***IP*** and ***Mask*** and click ***Add***.
  The IP-address will be shown in the list.
- With the ***trashcan*** beneath the IP-address you can delete the relative entry.
- Select the related zones in the section ***Zones***.
  Normally the zones of the physical interface will be adopted.
- Click ***Finish*** to complete the configuration.
- After the interface is added, you have to press the button ***Update Interface***.

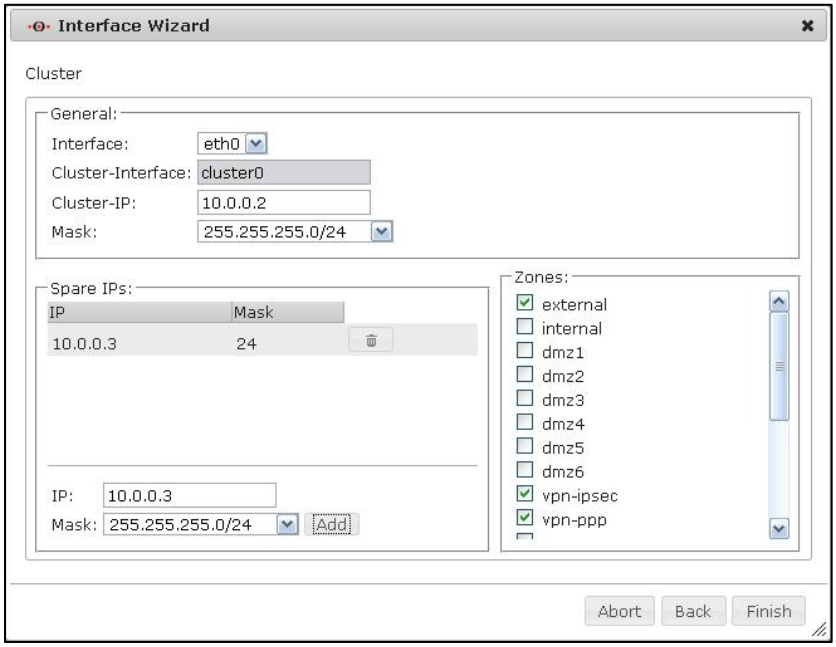


fig. 49 add cluster interface - set properties

7.2.1.7 Edit or Delete an Interface

In the lists of all interfaces on the tab Interfaces a wrench symbol and a trashcan symbol are positioned beneath the entries. With these buttons the entries can be edited or deleted.

- For editing click the ***wrench symbol***.
  The dialog ***Change Interface*** appears.
- Change the settings and save the new properties with ***Save***.

- For deleting click the ***trashcan symbol***.
- Click ***Yes*** at the conformation prompt.
  The entry will be deleted.

7.2.2 Routing

Routing entries define via which gateway a destination has to be reached.
The default route defines that all destinations are reachable via the internal gateway (internal interface).

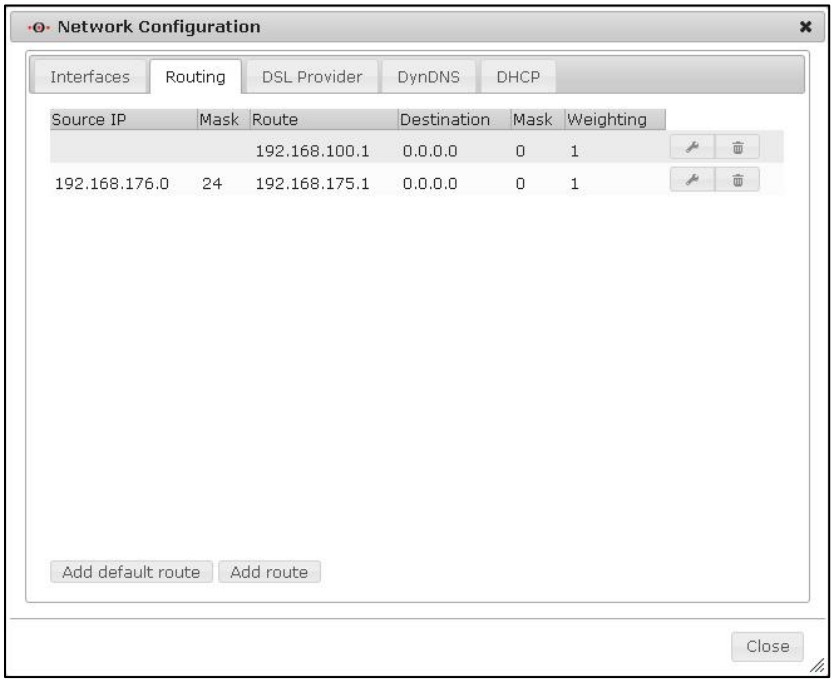


fig. 50 list of routing entries

7.2.2.1 Edit or Delete Routes

In the lists of all routing entries on the tab Routing a wrench symbol and a trashcan symbol are positioned beneath the entries. With these buttons the entries can be edited or deleted.

- For editing click the ***wrench symbol***.
  The dialog ***Edit Route*** appears.
- Change the settings and save the new properties with ***Save***.

- For deleting click the ***trashcan symbol***.
- Click ***Yes*** at the confirmation prompt.
  The entry will be deleted.

7.2.2.2 Add Default Route

- Click ***Add default route***.
  The dialog ***Add Default Route*** appears.
- Enter as ***Gateway*** the IP-address of the internal interface.
- The fields ***Destination Network*** and ***Destination Mask*** are predefined.
- The value ***Weighting*** defines the priority of the route.
  This statement is relevant if you use (two or more) internet connections (Multipath Routing).
  If the first route has the weighting 1 and the second one the weighting 2, the second route will be used twice as much as the first one. The weighting 5 and 10 have the same effect.

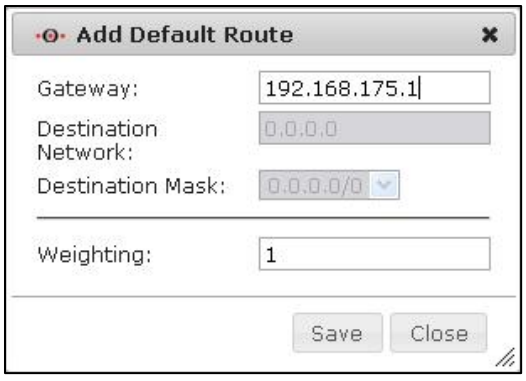


fig. 51 add default route

7.2.2.3 Add Route

Routes offer the possibility to find networks which are not directly connected to the appliance. To send a package to a network which is connected via a gateway (for example a router) to the appliance, the system must be informed about this. Otherwise the packages will be routed to the default gateway where they cannot be transmitted to the desired network.

- Switch to the tab ***Routing*** and click ***Add route***.
  The dialog ***Add Route*** appears.
- Select in the field ***Type*** if the route applies to all networks and computers or just for several ones.
  For all select ***without Source***.
  Otherwise select ***with Source*** and enter the IP-address and the subnet mask of the concerned network or host in the fields ***Source Network*** and ***Source Mask***.
- Enter the ***Gateway***, which should be used for reaching the destination network or destination host.
- In the fields ***Destination Network*** and ***Destination Mask*** enter the IP-address and the subnet mask of the destination.
- You can assign a weighting for the route in the field ***Weighting***.

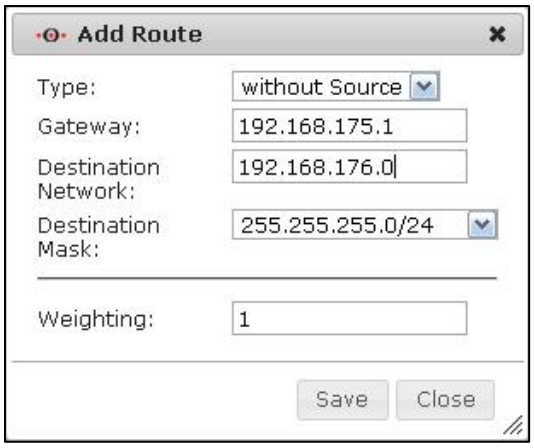


fig. 52 general route

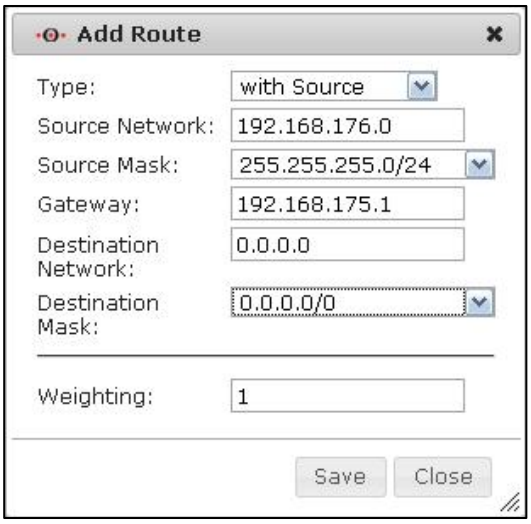


fig. 53 route for defined sources

7.2.3 DSL Provider

When connecting the internet using a DSL dialup mode, you have to enter the provider and your account data, so the appliance can connect to the internet by itself.

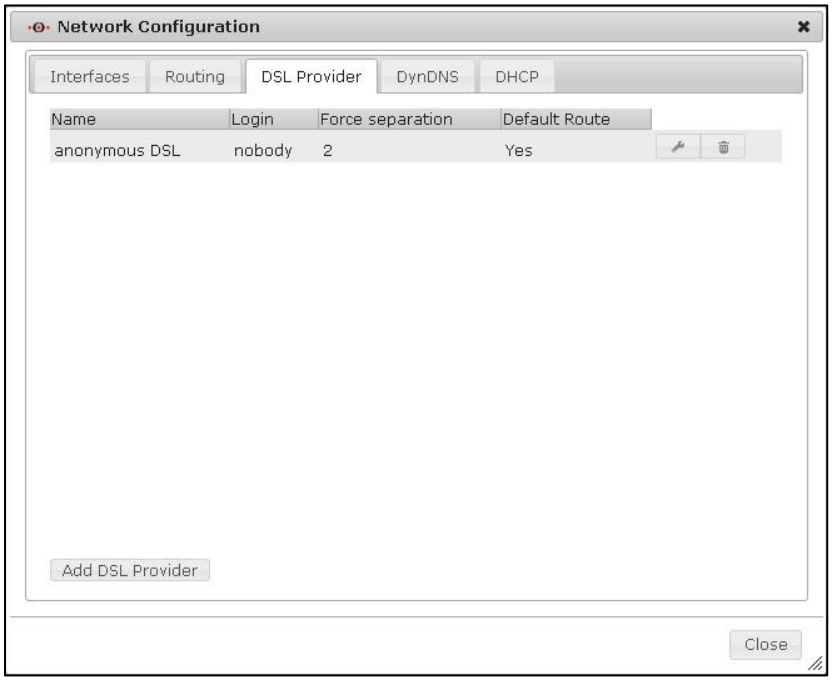


fig. 54 list of DSL provider

7.2.3.1 Edit or Delete DSL Provider

In the list of all saved DSL providers on the tab DSL Provider a wrench symbol and a trash-can symbol are positioned beneath the entries. With these buttons the entries can be edited or deleted.

- For editing click the ***wrench symbol***.
  The dialog ***Edit DSL Provider*** appears.
- Change the settings and save the new properties with ***Save***.

- For deleting click the ***trashcan symbol***.
- Click ***Yes*** at the conformation promt.
  The entry will be deleted.

7.2.3.2 DSL Provider create

- Click the button ***Add DSL Provider***.
  The dialog ***Add DSL Provider*** appears.
- Enter a name for the provider into the field ***Name***.
- Type your login data into the field ***Login***.
- Enter your password into the field ***Password*** and retype it in the field ***Confirm password***.
- If you activate the checkbox ***Default Route*** a standard route will be set automatically.
- Select a time in the field ***Separation***. At this time the appliances disconnect the internet connection. If you choose 0 the appliance does not force a disconnection.

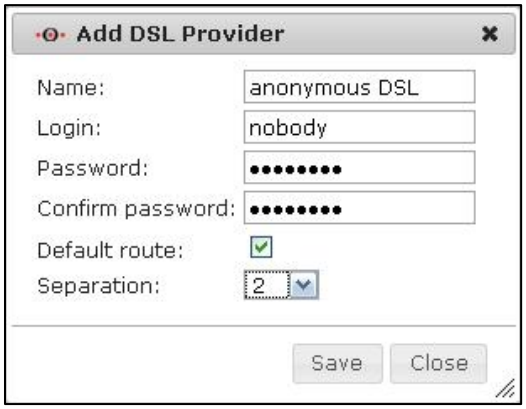


fig. 55 create DSL Provider

7.2.4 DynDNS

If you don’t have a static IP address, but a dynamic one which is changing at every dial into the internet, you can use a DynDNS service for always being reachable with the same host-name. This is only required if you offer a service which should be reachable from the internet (for example web server, VPN connection) or if you want to administrate the firewall from the external net.
If you use the DynDNS services the client transmits at every dial-in its current IP address to the DynDNS service provider. The current IP address is stored by the provider. The provider links your static hostname with your current IP address. In this way it is assured that your host is always available by the host name. The appliance transfers the current IP address to the DynDNS provider.

You can create six interfaces
These will be listed in the tab DynDNS.

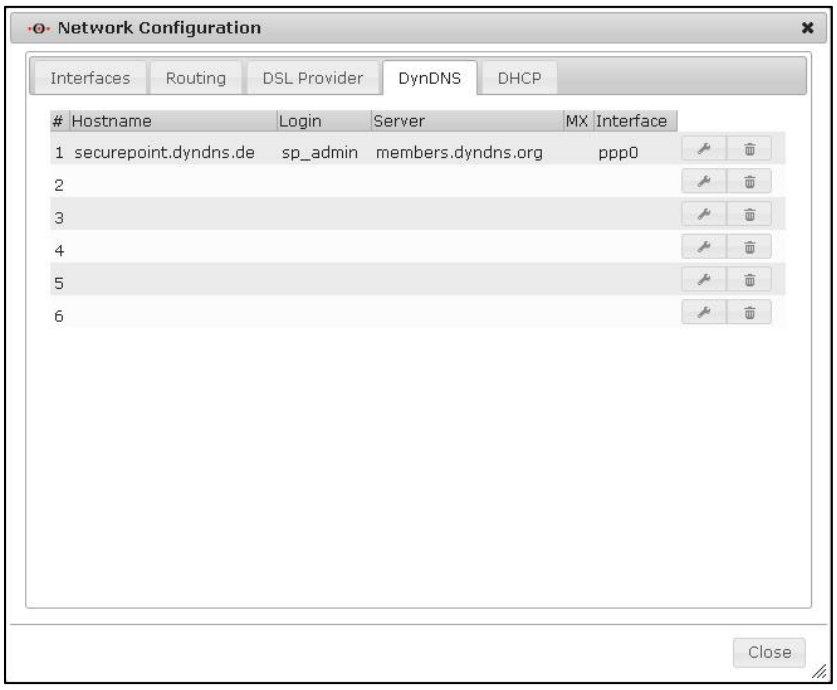


fig. 56 list of the external DNS update service for dynamical IP addresses

7.2.4.1 Create or Edit a DynDNS Entry

- To create a new entry or to edit an existing entry, click on the ***wrench symbol***. The dialog ***Change DynDNS*** appears.
- Enter your domain name into the field ***Hostname***
- Type your access data of your services provider into the fields ***Login*** and ***Password***.
- Enter the address of the DynDNS server into the field ***Server***.
- In the field ***MX*** enter the domain for the e-mail reception (for example securepoint.de).
- Select the interface which should be used for this connection from the field ***Interface*** (mostly a ppp interface).

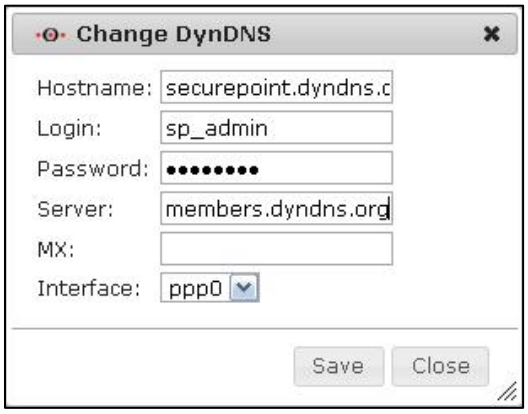


fig. 57 create a DynDNS entry

7.2.4.2 Delete a DynDNS Entry

- To delete a DynDNS Entry, click on the ***trashcan symbol*** beneath the relative entry.
- Confirm the security query with ***Yes***.
- The DynDNS entry will be deleted.

7.2.5 DHCP

The Dynamic Host Configuration Protocol can assign IP-addresses and other network settings to the clients. If you start a client of the internal network, the operating system of the client sends a query to the DHCP services of the server. The server transmits an available IP-address, the IP-addresses of the DNS server and of the default gateway to the client.
If you don't want to use this service, make no entries in this section and disable the client DHCP Server in the menu ***applications*** → ***Service Status***.

- Enter the internal subnet into the field ***Local Subnet*** and the relating subnet mask into the field ***Netmask***.
- Define the IP address range. The DHCP server will assign IP addresses to the clients from this range.
  The range must be a part of the local subnet. Consider that the first address (xxx.xxx.xxx.1) is mostly assigned to the default gateway. Hence it cannot be part of the DHCP address pool. Furthermore reserve a couple of IP addresses for computer and server which need static IP addresses to warrant the correct working of several services.
  Enter the lower limit of the range into the field ***DHCP-Pool start*** and the upper limit into the field ***DHCP-Pool end***.
- Enter the standard gateway into the field ***Default Gateway***. This is the IP address of the internal interface.
- Type the IP addresses of the DNS server into the fields ***Nameserver #1*** and ***Nameserver #2***.
- Type the IP addresses of the WINS server into the fields ***WINS Server #1*** and ***WINS Server #2***, if you use them.
- Store your settings with ***Save***.

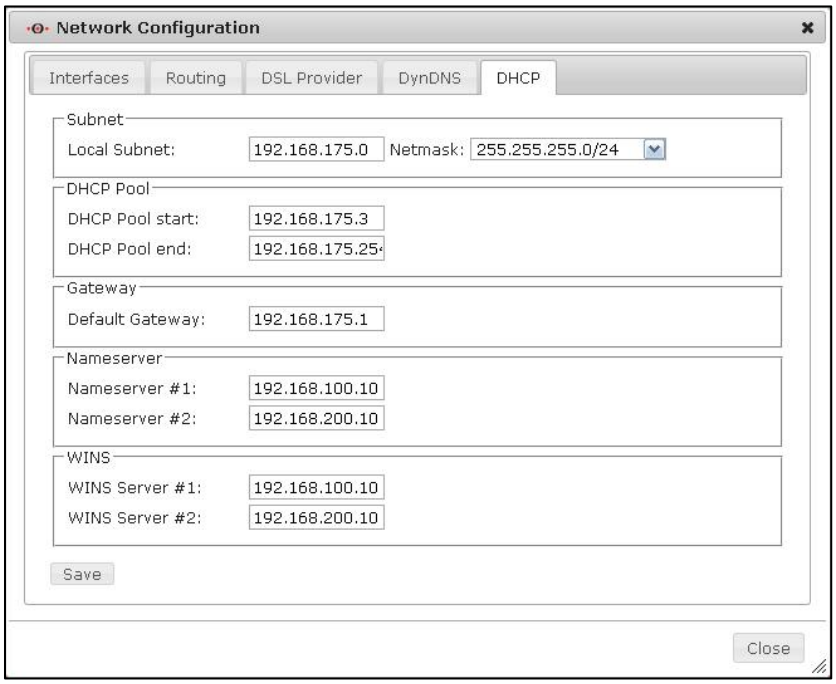


fig. 58 settings for DHCP server

7.2.6 DHCP Relay

The appliance can also be used as DHCP relay. In this case a central DHCP server distributes the DHCP information in the network. The appliance receives the broadcast querys and forwards them to the central DHCP server. The answers of the server will be returned to the clients by the DHCP relay. In this way the clients receive IP addresses and network information dynamically although the DHCP server stands in another subnet.

- In the section ***Interface*** define the interfaces from which net the DHCP queries should be received and to which they should be forwarded.
  Select the interface from the ***dropdownbox*** and click on ***Add Interface***.
- Define the IP address of the central DHCP server in the list ***IP Addresses***.
  Type the IP address into the ***field*** and click ***Add IP Address***.
- Afterward click ***Save*** and ***Update Interfaces***.

Note: For this traffic no rules must be defiened.

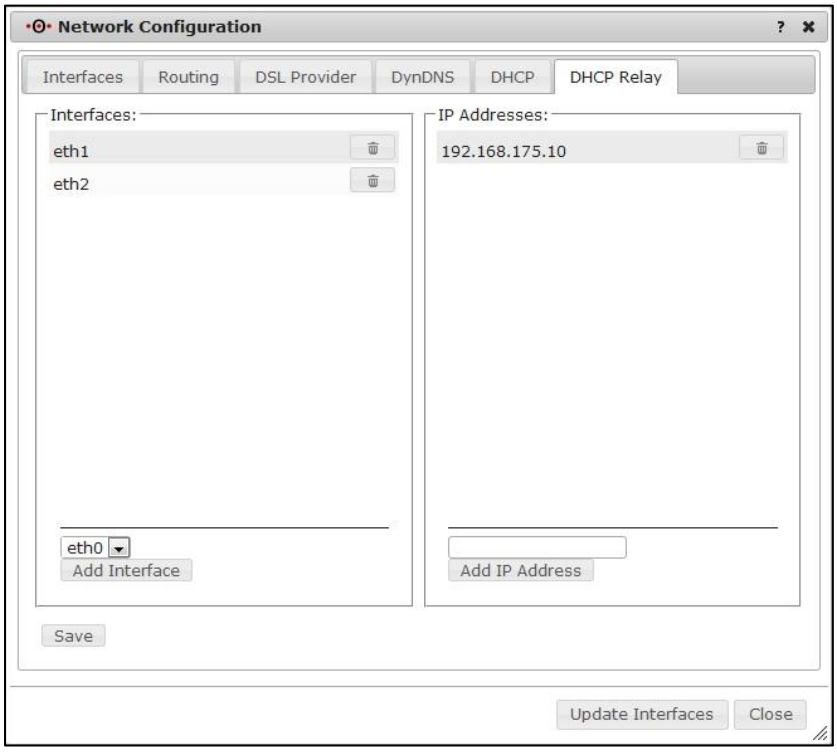


fig. 59 settings for DHCP Relay

7.3 Zones

This dialog lists all arranged zones of the appliance and the allocated interfaces. The zones conduce to confine or connect interfaces and associated nets.
The important zones are already set in factory.
Every zone is available only once and can be allocated to just one interface. If you want to use interfaces in the same zone, you have to add a new zone.

- Type a name for the new zone in the field ***Name*** in the section ***Add Zone***.
- Select an interface which should be allocated to the zone from the dropdown field ***Interface***.
- Click ***Add Zone*** to save the settings.

Note: If you want to change allocated interfaces, use the tab ***Interfaces*** in the menu ***Network → Network Configuration***.

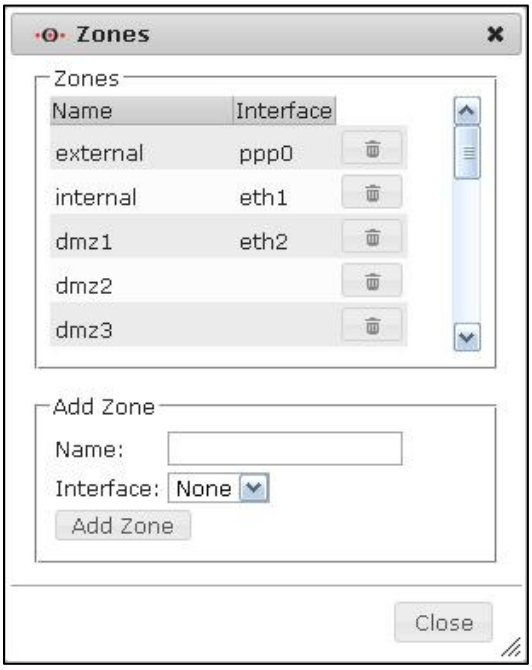


fig. 60 dialog for adding and deleting zones

- To delete a zone, click on the ***trashcan symbol*** in the column of the related zone.
- Confirm the securety query with ***Yes***.
  The zone will be deleted.

7.4 Network Tools

The point Network Tools opens a dialog which offers three needful functions. These functions are often used in network engineering. Therefore they are implemented in the appliance.

button	meaning	description
	lookup	Detects IP addresses of a host.
	ping	Detects if a computer is reachable in the network.
	routing table	Shows the routing entries of the appliance.

7.4.1 Lookup

The name of this function is deduced from the command “nslookup”. The function queries the nameserver which IP address belongs to a defined host name. This is called name resolution. The inversion search to detect the hostname of an IP address is not supported.

- Enter a hostname into the field ***Host name***.
- Click on the icon ***Lookup***.
  If the host is known all related IP addresses will be shown.

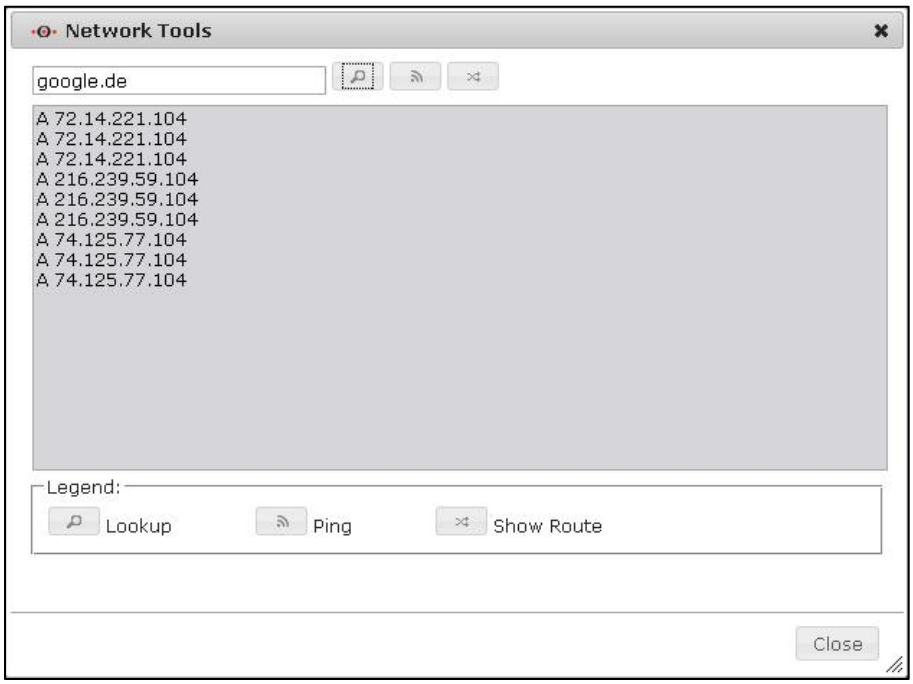


fig. 61 looking for IP addresses

7.4.2 Ping

A Ping checks if a defined computer is reachable in the IP network. The appliance is sending an ICMP echo-request to the computer, so-called Ping. The appliance expects an ICMP echo-reply as an answer (often called Pong). If the remote computer sends this answer, the computer is reachable.
If the computer is not reachable the function shows the message ***undefined***. The query also fails, if the computer is configured to not answer Pings.

- Enter a hostname or an IP address into the field ***Please enter a host***.
- Click on the icon ***Ping.***
  If the computer answers, the times the resond packages needed are shown and the average time of all packages.Furthermore the list shows how many packages are send, received and lost.
  If the host does not answer, the message ***undefined*** will be shown.

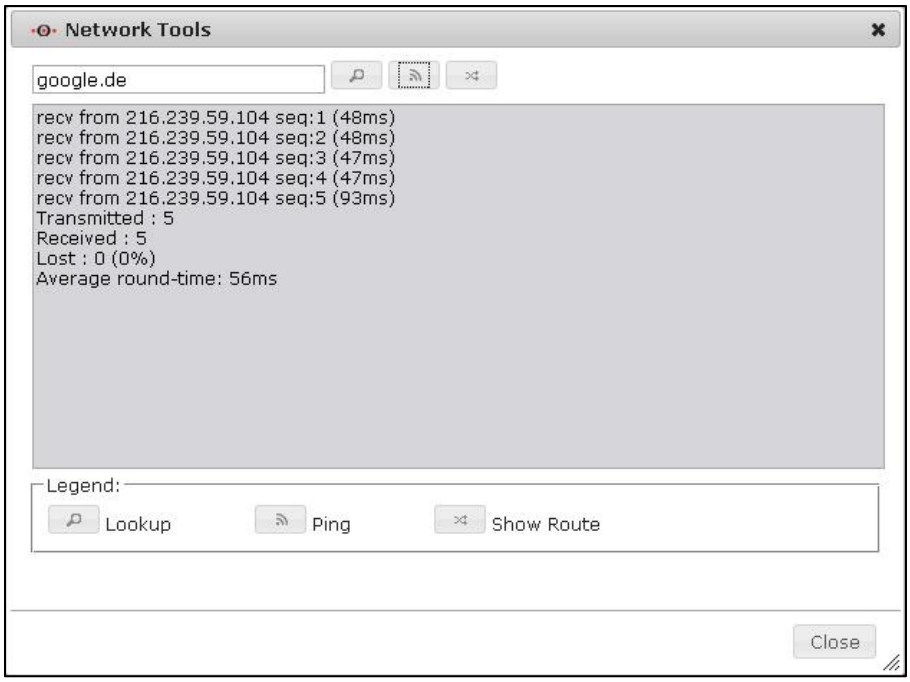


fig. 62 result of a Ping

7.4.3 Routing Table

The command ***Routing Table*** shows the routing table of the appliance. You don´t have to enter data.

➢ Click the button ***Routing Table***.
All entered routes will be listed.

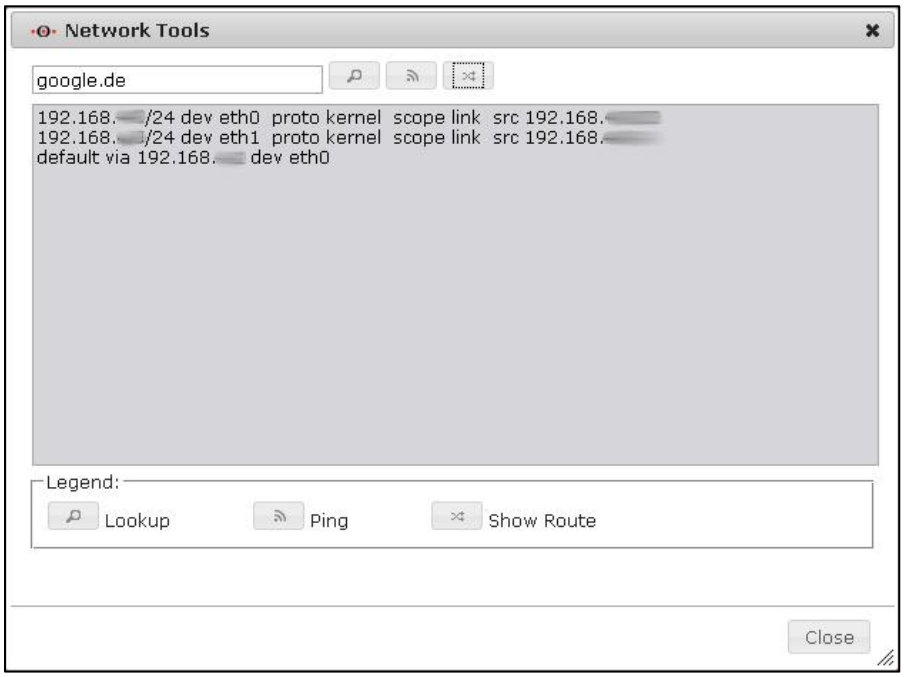


fig. 63 output of the routing table

8 Menu Firewall

This menu item includes all functions for creating firewall rules. The entry Portfilter shows the system of rules. This section manages rights of all computers, computer groups, networks, users, user groups and devices.

fig. 64 dropdown menu of the menu item firewall

name	description
Portfilter	Defines rules for access to networks and units.
Hide NAT	Dynamic Network Address Translation. The internal addresses will be translated to the external address.
Port Forwarding	Request from the internet to defined ports will be transmitted to defined internal or DMZ computers by the firewall.
Services	To define exact rules in the portfilter you use applicable services. In this section all services are listed with their used ports and protocols. You can edit them or add new ones.
Service Groups	Services which provide similar functions are subsumed to groups.
Network Objects	Network objects specify groups, users or computers. You can only define rules for created network objects.
Network Groups	Network objects are subsumed to device groups.

8.1 Portfilter

The port filter is the main item of the firewall. Rules are defined in this section, which control the whole data traffic. The rules are editable in the properties networks, user, services, and time. You can define if traffic which matched with a created rule will be logged.
By default, traffic will be stopped if no rule is set which allows the traffic.

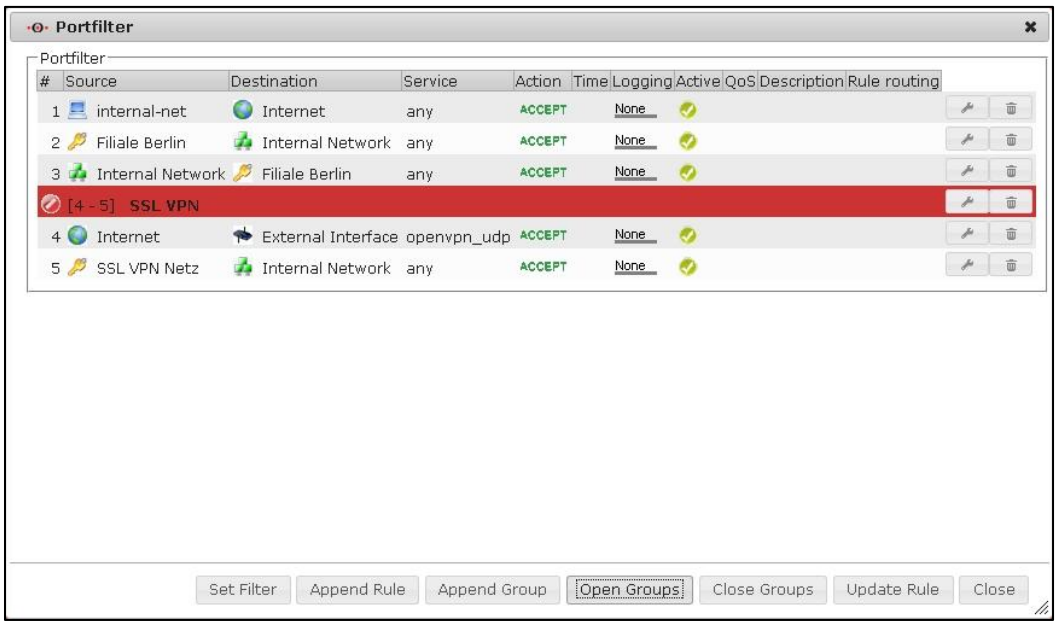

Portfilter
Portfilter
Source Destination Service Action Time Logging Active QoS Description Rule routing
1 internal-net Internet any ACCEPT None
2 Filiale Berlin Internal Network any ACCEPT None
3 Internal Network Filiale Berlin any ACCEPT None
[4 - 5] SSL VPN
4 Internet External Interface openvpn_udp ACCEPT None
5 SSL VPN Netz Internal Network any ACCEPT None
Set Filter
Append Rule
Append Group
Open Groups
Close Groups
Update Rule
Close

fig. 65 overview of all created rules

Note: You can also define IP-Table rules in the category ***Advanced Settings*** (see chapter 12.6.5). On the tab ***Templates*** use the ***Application*** `securepoint_firewall` and the ***Template*** `/etc/post_rules.sh`.

A rule always has the following structure:

- Who (where from/which source) uses which service to access a defined destination. Then you have to decide if the activity is allowed (Accept), denied (Drop) or refused (Reject). With the action Drop the data packet will be discarded. The action Reject will transmit to the sender the error message “Destination unreachable”.
- You can log the traffic when it is matched by a rule. You can decide between three settings:
  - None → No logging.
  - Short → The first three packets of a new connection will be logged. After a minute the next three packets will be logged.
  - Long → All packets will be logged.
- The rule can be limited temporarity (days and time).
- A short description can be set.

With the ***wrench symbol*** beneath the rule you can call a dialog for editing the rule.
With the ***trashcan symbol*** beneath the rule you can delete the rule.
Rules can be dissarranged by „Drag and Drop“. The order of the rules in the portfilter can be important because the rules will be processed in sequence (Once dropped packets cannot be accepted by a later rule.).

Notice: To activate new rules you have to click the button ***Update Rule*** in the ***Portfilter*** Dialog.
If you changed the order of the rules you have to update the rules also.

You can modify the view of the portfilter by using the filter function. This way you can find a desired rule fast.

- Click on ***Set Filter*** in the portfilter overview to open the dialog ***Set Filter***.
- Activate the filter by selecting the entry ***On*** from the dropdown field ***Enable Filter***.
- You can filter the entries of the portfilter by several criteria.
  The criteria are:
- Groups:
- Source Network Groups Shows all entries which have the given group as source.
- Destination Network Groups Shows all entries which have the given group as destination.
- Service Groups Shows all entries which use the given group as service.
- Objects and Services:
- Source Network Objects Shows all entries which have the given object as source.
- Destination Network Objects Shows all entries which have the given object as destination.
- Services Shows all entries which use the given service.
- Activate the desired filter criterion and select a filter word from the related dropdown box.
- Click ***Close***.
  The set filter will be used for the firewall rules.

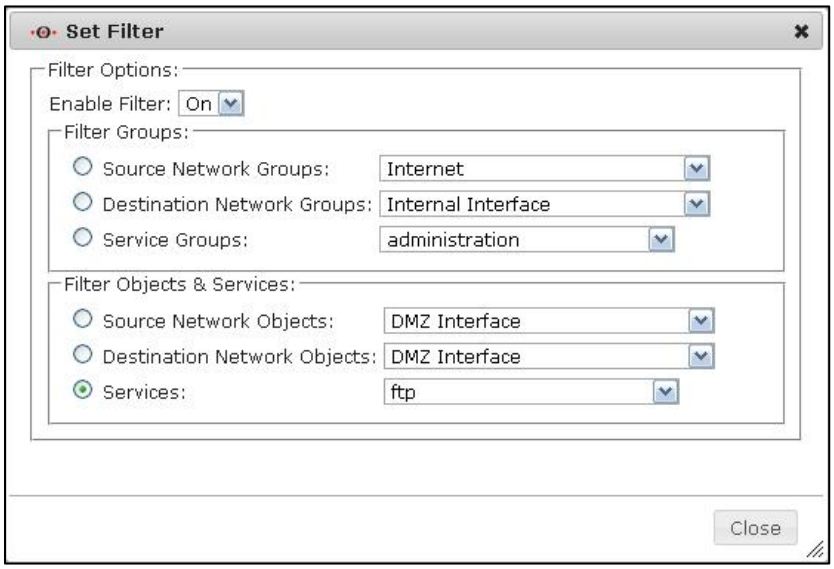


fig. 66 filter firewall rules

8.1.1 Create Rule

- Click ***Appent Rule*** to append a new rule.
  The dialog ***Add Rule*** appears.
- The rule will be created on the tab ***General***.
- Select in the field ***Source*** a source from the list.
- Select in the field ***Destination*** the destination from the list.
- Define in the field ***Service*** which service will be used.
- Choose in the field ***Action*** if the access should be accepted or denied.
- Select in the field ***Logging*** which logging mode should be used.
- In the field ***QoS*** (Quality of service) you can limit the bandwidth.
- At ***Rule Routing*** you can define which gateway should be used for packages of this rule. For example: IPSec connections must always communicate over the same interface. This setting is important if you use several internet connections.

- **Note**: For source and destination a network object must exist which defines the item exactly. If it doesn't exist you have to create it.
  If the used service is not listed you can define a new one.

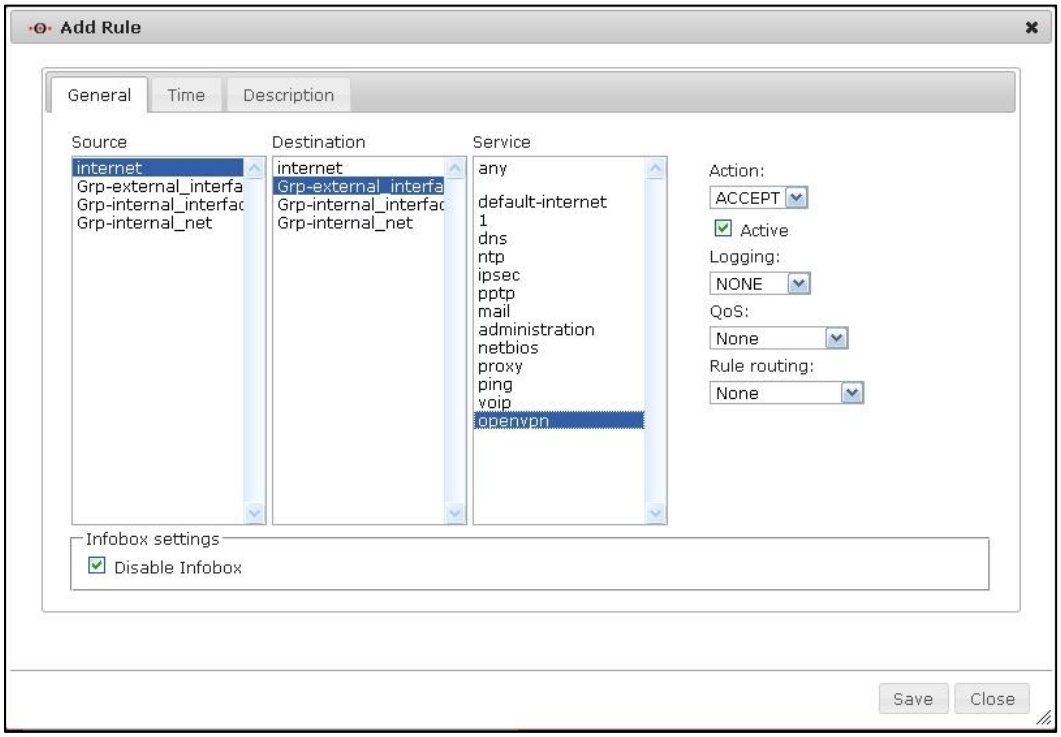


fig. 67 create new rule - tab general

8.1.1.1 Infobox Function

When the mouse cursor rolls over an entry in the list, an infobox appears which shows details of the entry. It shows which objects or services are elements of the related group.
You can enable this function by deactivating the checkbox ***Disable Infobox***.

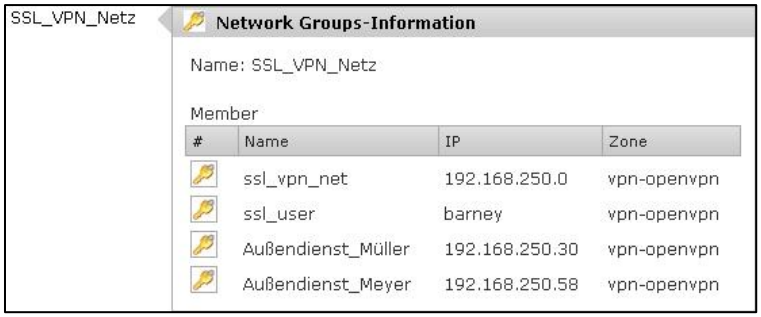


fig. 68 group elements with IP address and zone affiliation

8.1.1.2 Tab Time

On the tab ***Time*** you can limit the validity period of a rule.

If you do not set any limit, the rule is valid all the time.

- Click on the tab ***Time***.
- Select a beginning time and an ending time for every day at which the rule should be limited.
- The ***top dropdown field*** belongs to the beginning time and the ***bottom dropdown field*** belongs to the ending time.

fig. 69 add new rule - tab time

8.1.1.3 Tab Description

On the tab ***Description*** you can enter an explanation for the rule.

- Click on the tab ***Description***.
- Click into the text field and enter a description.
- Click ***Save*** to store the rule.

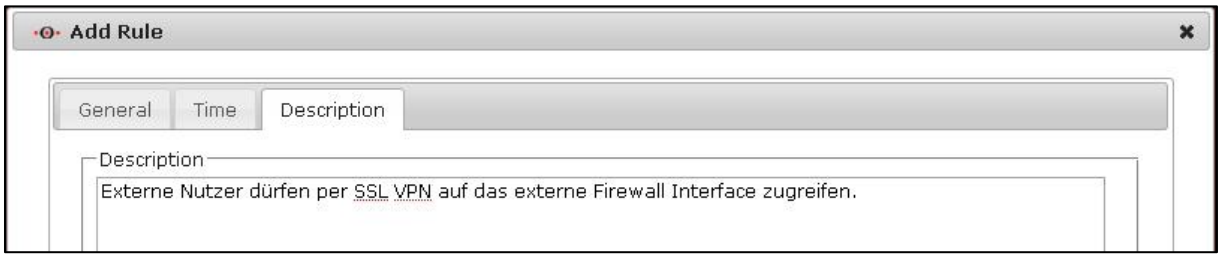


fig. 70 add new rule - tab description

8.1.2 Create Rule Group

You can subsume several rules to one group. If you unite several rules of one scope to one group you can arrange the portfilter clearly.

- Click on the button ***Append Group*** in the dialog ***Portfilter***.
  The dialog ***Append Group*** appears.
- Enter a name for the new group in the field ***Groupname***.
- Click on ***Add***.
  The new will be added to the ***Portfilter*** at the bottom position.
- You can move the rule into the group via ***Drag & Drop***.

fig. 71 add rule group

8.1.3 Organize Rules and Groups

The order of rules in the portfilter can have a big effect on the performance of the appliance because the rules are executed sequentially.
If a packet passes through all rules of the portfilter and is dropped by the last rule, it could be more sensible to position the blocking rule at the top of the portfilter. Especially if this kind of packets come in often.
You can not only move single rules but also rule groups and rules inside of a group. It is also possible to move rules from one group into another.
For organizing the rule use “Drag & Drop” and the context menu which opens with a right mouse click.

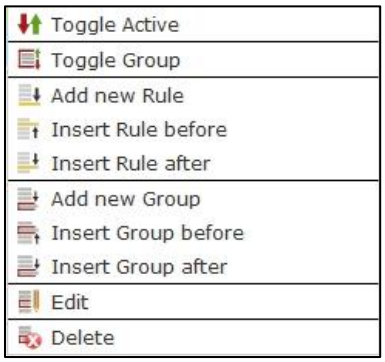


fig. 72 context menu of the portfilter dialog

The context menu offers the possibility to create rules and groups at defined positions. So you don’t have to move them after creation.
Switch the status of a highlighted rule by using the option ***Toggle Active***. The option ***Toggle Group*** changes the status of all rules in a group.
The context menu also includes the options ***Edit*** and ***Delete***.
In the second column of every row you will find the ***wrench-*** and the ***trashcan symbol*** for editing and deletion.
Instrumental in managing the rule set are the options ***Open Groups*** and ***Close Groups***.
They open or close all groups in the list. The symbols in front of the groups open or close a single group.

The green symbol with the two arrows presents a closed group. Click on it to open the group.
The red symbol presents an open group. Click on it to close the group.

8.2 Hide NAT

Private IP-addresses are not routed in the internet. Therefore outgoing packets must get the external IP of the firewall. The function Hide Nat realites this.

The ***Source*** is the network or the computer, which IP will be replaced by the Hide NAT. ***Behind IP / Interface*** describes which IP-address the packets get instead of their own one. You can define an IP-address or an interface. If you use a dynamic IP, insert the DSL interface.
The ***Destination*** must be set to declare, in which case the Hide NAT is to be used. Network objects are used for source and destination. To create Hide NAT rules, you maybe have to create network objects before.
The option ***Include*** means that the Hide NAT will be used. The ***Exclude*** option means that the Hide NAT will not be used and so packets will be send with their original IP-address (for example in tunnel connections – IPSec, site-to-site).

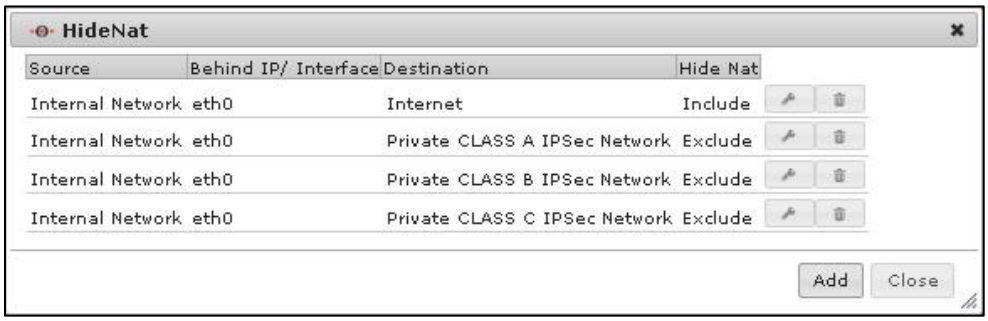


fig. 73 list of Hide NAT rules

- Click on ***Add***, to define a new Hide NAT rule.
  The dialog ***Add HideNat*** appears.
- Under ***Type*** you can choose between ***Include*** and ***Exclude***.
- Under ***Source*** define which objects should be 'nated'.
  In this example the internal network.
- Under ***Interface*** set the interface which should be used.
  If you have a static IP-address, select ***eth0***. If you use a dynamic IP-address, deploy the DSL interface ***ppp0***.
- If the rule should be used for all destinations, select the entry ***any*** in the field ***Destination***.
- ***Position*** defines the position in the Hide NAT rule table. The rules are executed sequential excepting the Exclude rules which are executed at first regardless of their position.

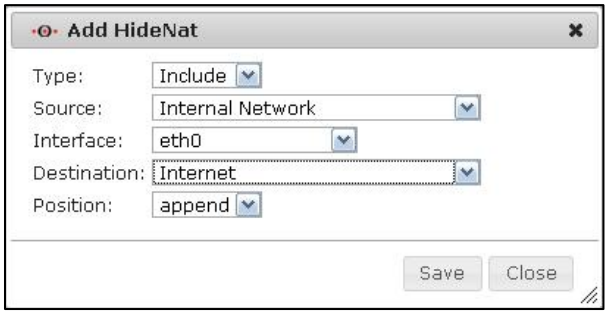


fig. 74 create HideNAT rule

8.3 Port Forwarding

The menu item Port Forwarding includes the functions Port Forwarding and Port Translation. Both functions define the destination of packages which reach the firewall at a defined port. Port Forwarding direct packages arriving at the defined port to a determined computer. Port Translation replaces the port of an ariving package with a self defined port.

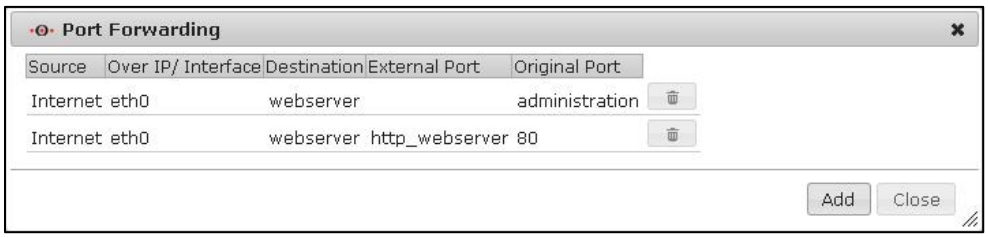


fig. 75 list of port forwarding and port translation rules

8.3.1 Port Forwarding

Via Port Forwarding you can conduct inquiries, which are directed to a specified port, to a defined computer. For Example: You can conduct HTTP queries at port 80 directly to the web server. For this forwarding a network object must exist for the web server.

- Click ***Port Forwarding*** in the dropdown menu of the ***Firewall*** icon.
  The window ***Port Forwarding*** appears, which displays all forwarding rules.
- Click ***Add***, to create a new forwarding.
  The dialog ***Add Port Forwarding*** appears.
- Select ***Port Forwarding*** as type.
- Under ***Source*** select from which network the query is coming.
- Under ***Interface*** define which interface is used by the query.
- For ***Destination*** select a network object to which the query should be forwarded.
- Under ***External Port*** select the service and hence the port, which should be used.
- Store your settings with ***Save***.

Note: A rule in the portfilter must be set, to allow the port forwarding.

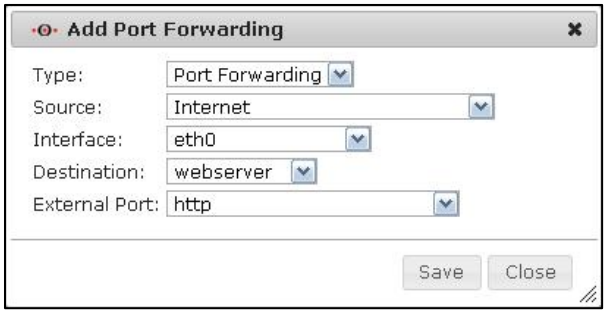


fig. 76 create port forwarding rule

8.3.2 Port Translation

With port translation you can change default ports to self defined ports.

Example: You want to run two web servers in the DMZ. But the default HTTP port 80 cannot be set twice. So you redirect the port to another one. For example 2080.

- Click ***Port Forwarding*** in the dropdown menu of the ***Firewall*** icon.
  The window ***Port Forwarding*** appears, which displays all forwarding rules.
- Click ***Add*** to create a new port translation rule.
  The dialog ***Add Port Forwarding*** appears.
- Select ***Port Translation*** as type.
- Under ***Source*** select, from which network the query is coming.
- Under ***Interface*** define, which interface is used by the query.
- For ***Destination*** select a network object to which the query should be forwarded.
- Under ***External Port*** select the service and hence the port, which should be used.
- Under ***Original Port*** select the port you want to redirect to.
- Store your settings with ***Save***.
-
- **Note:** A rule in the portfilter must be set, to allow the port forwarding.

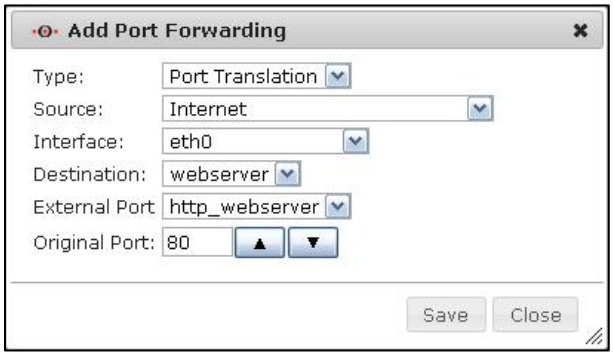


fig. 77 create port translation rule

8.4 Services

Services are used to specify the rules in the portfilter. Every service uses a certain protocol and port or a port range. This is listed in the section ***Services***.
The list contains a lot of services. You can add new services, edit and delete services.

8.4.1 Delete and Edit Services

- Click the trashcan symbol beneath the service to delete it.
- Confirm the security query with ***Yes***.

- Click the wrench symbolbenaeth the service to edit it.
- Make modifications in the appearing dialog.
  Click ***Save***.

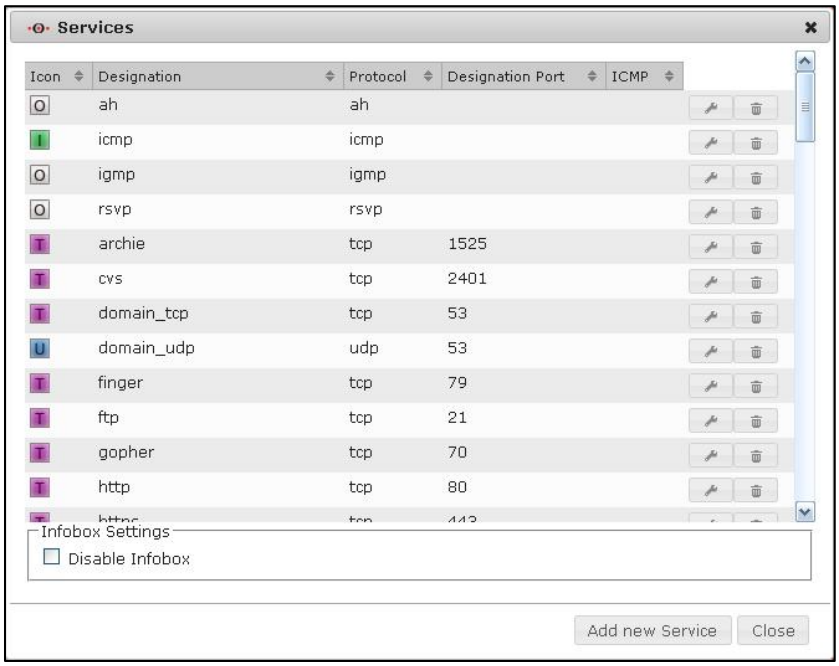


fig. 78 list of available services

8.4.2 Services Information

The function ***Infobox*** shows information about services if the mouse cursor rolls over it.
You can enable this function by unchecking the checkbox ***Disable Infobox***.
The infobox shows not only the name and the service group affiliation of the service but also if the service is used in a firewall rule. In this case the rule number and a summary of the rule are shown.

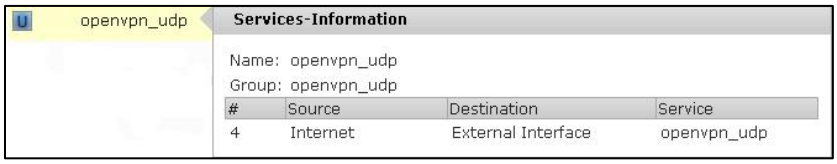


fig. 79 infobox for services

8.4.3 Add service

- Click ***Add new Service***.
  The dialog ***New Service*** appears.
- In the field ***Designation*** enter a name for the new service.
- In the field ***Protocol*** select a protocol from the list which is used by the service.
  If you choose the ***icmp*** protocol, you have to select an ***ICMP Control Message*** too.
- If the service uses a specified port, insert this port in the field ***Destination Port***.
  If the service uses a port range, select ***Port Range*** at the field ***Type***. Insert the start an end port of the range into the fields ***Port Range Start*** and ***Port Range End***.
- Store the new service with ***Save***.

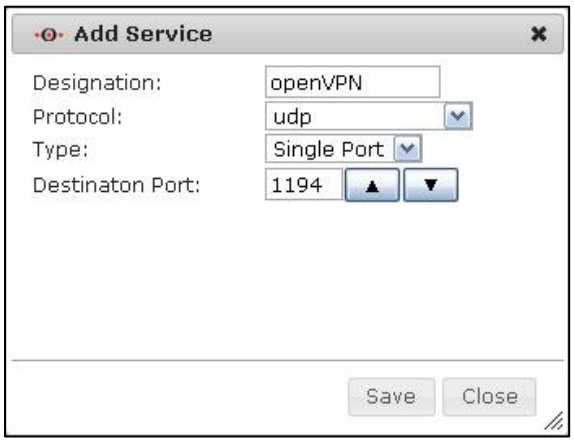


fig. 80 add service - single port

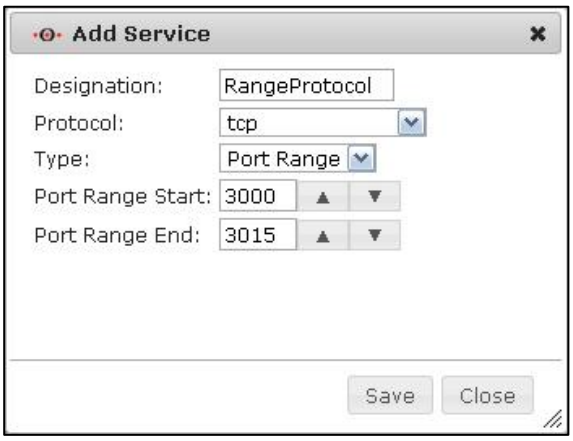


fig. 81 add service - port range

8.5 Service Groups

In the section service groups you can subsume several services into a group, delete services from existing groups or add services to existing groups. These groups can be used in the portfilter for rule creation.

If the mouse cursor rolls over a service, an infobox can be displayed which shows the properties of the service. You can enable this feature by unchecking the checkbox ***Disable Infobox***.

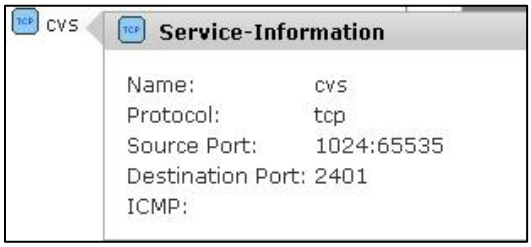


fig. 82 infobox shows properties of a service

You also can retrieve information of service groups.

- Select a service group from the ***dropdown box***.
- Click on the ***information symbol*** beneath the dropdown box. An infobox appears.

The infobox shows the name of the service group and if the group is used in a firewall rule. In this case the number and a summary of the rule are shown.

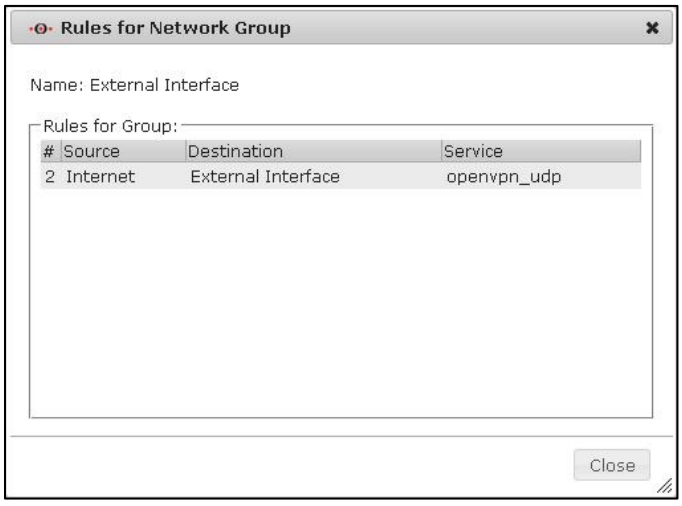


fig. 83 infobox for a service group

8.5.1 Edit Existing Service Groups

- Select a group from the dropdown box in the section ***Service Groups***.
  The services which are elements of the selected group are shown in the right table.
- You can add services by highlighting services in the left table. It could be helpful to disable the infobox.
- Click on the ***rightwards arrow button*** between the tables.
  The service will be move from the left table into the right table.

- Highlight a service you want to ***delete*** in the right table
- Click on the ***leftwards arrow button*** between the tables.
  The highlighted service will move from the right table to the left table.

- You can ***delete*** the whole group by a click on the ***trashcan symbol*** beneath the dropdown box.
  Confirm the Security Query with ***Yes***.

Note: Click on the button ***Update Rule*** to apply the service group changes to the rules of the portfilter.

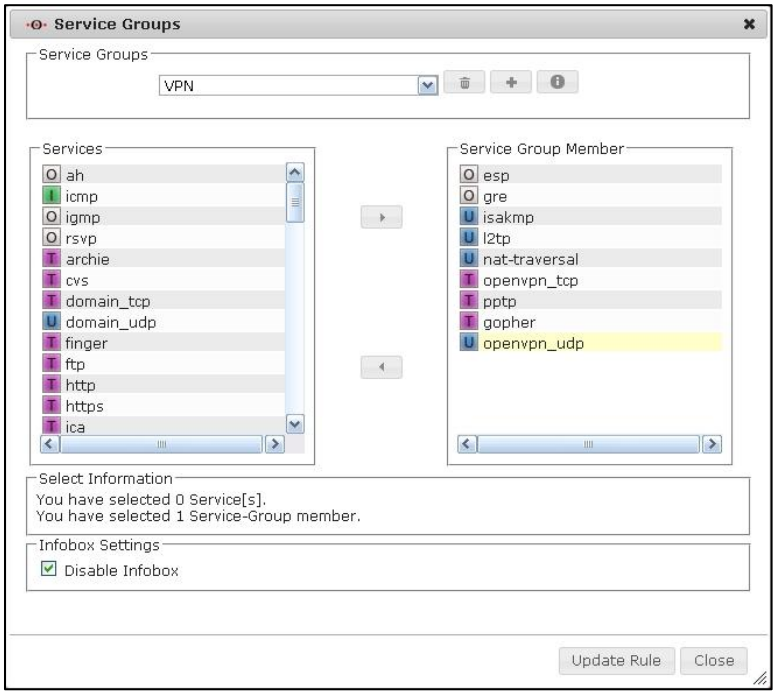


fig. 84 dialog service groups

8.5.2 Create New Service Group

You can also subsume services in new service groups

- Click on the ***plus symbol*** in the section ***Service Groups***.
  The dialog ***Add service group*** appears.
- Enter a name for the new service group and click ***Add***.
- Select the just created service group from the ***dropdown box***.
- The message ***No member in service group*** appears in the right table, because no service is added yet
- Add services to the new group like described in the previous article.

fig. 85 enter name for the new service group

8.6 Network Objects

Network objects describe certain computers, network groups, users, interfaces, VPN-computers and –networks. With these network objects the rules in the portfilter can be defined exactly.

- Click the on the menu item ***Firewall*** in the navigation bar
  Click in the dropdown menu on the entry ***Network Objects***.
  The window ***Network-Objects*** appears.
- In this window all available network objects are listed. The table can be ordered by the values of the separate columns.
- Behind the objects are buttons for editing and deleting the related object.
- You can add objects with the buttons at the bottom of the window.

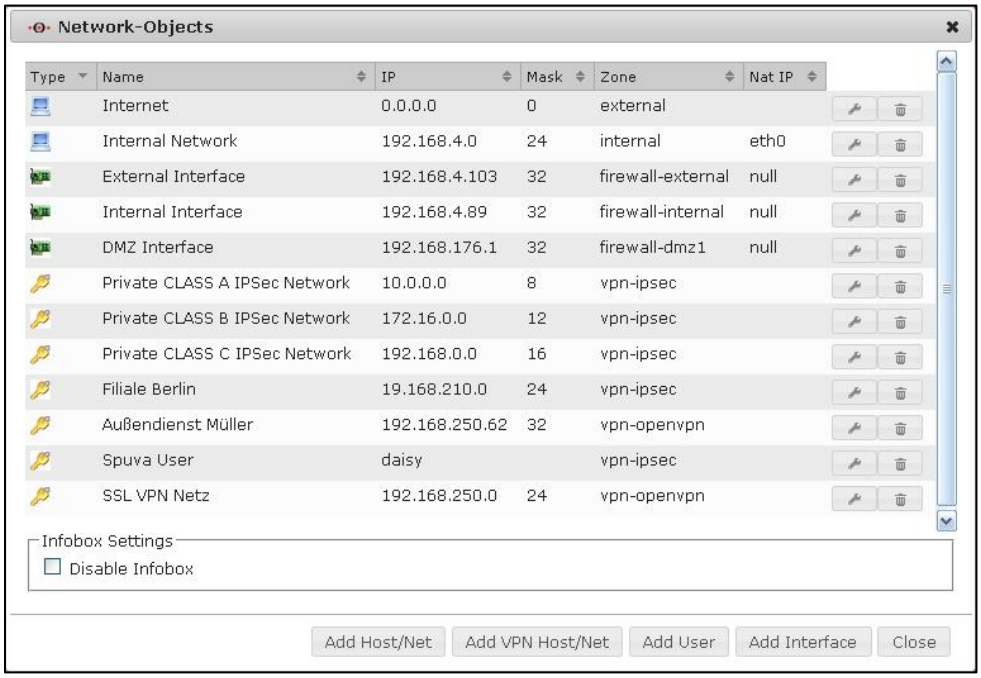


fig. 86 list of created network objects

8.6.1 Network Object Information

The function ***Infobox*** shows information of a network object if the mouse cursor rolls over it. You can enable this function by unchecking the checkbox ***Disable Infobox***.
The infobox shows not only the name and the object group affiliation but also if the object is used in a firewall rule. In this case the numbers and a summary of the rules are shown.

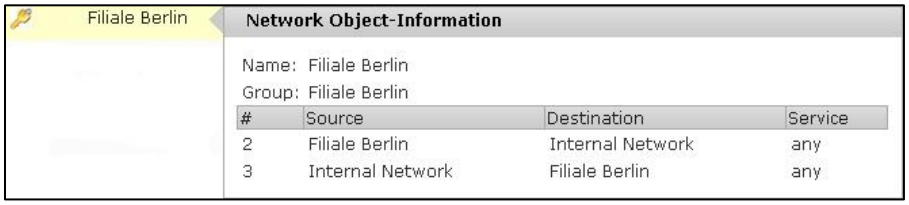


fig. 87 information of network objects

8.6.2 Add Host/Net

To create a network object for a network or a computer use the following approach.

- Click ***Add Host/Net***.
  The dialog ***Add Host/Net*** appears.
- Enter a name for the new object in the field ***Name***.
- Under ***Type*** select whether you want to create an object for a network or for a computer.
- ***Host:*** Under ***IP Address*** enter the according IP-address of the computer.
  Under the dropdown field ***Zone*** select the zone which the computer is associated with.
- ***Network:*** Under ***IP Address*** enter the IP-address of the network.
  Select from the dropdown field ***Netmask*** the compatible netmask.
  Im the field ***Zone*** enter the zone of the network.
- Select which ***NAT IP*** should be used.
- Store your settings with ***Save***.

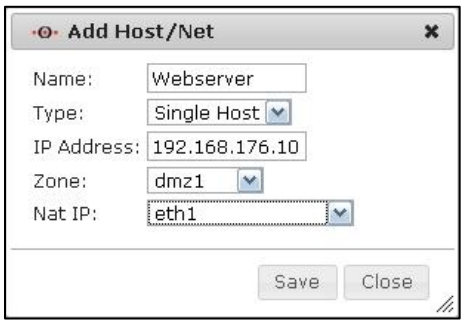


fig. 88 create an object for a computer

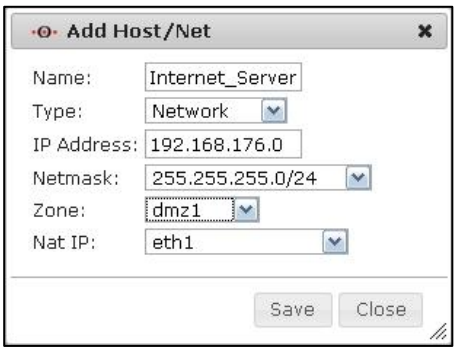


fig. 89 create an object for a network

8.6.3 Add VPN Host/Net

The creation of VPN objects isn't very different from the creation of network and computer objects. Just other zones are available.

- Select the zone ***vpn-ipsec***, ***vpn-ppp*** or ***vpn-openvpn*** against the VPN method you are using.

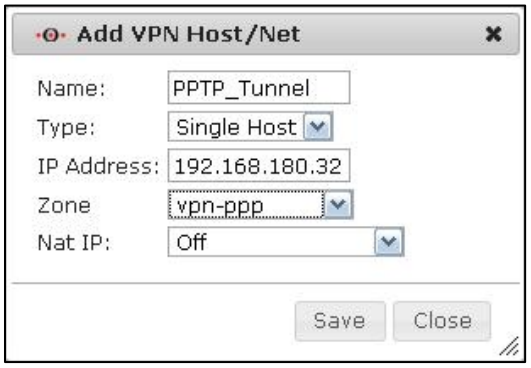


fig. 90 create object for a VPN computer

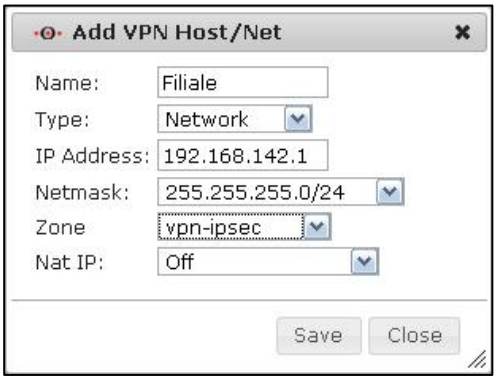


fig. 91 create an object for a VPN network

8.6.4 Add User

You can also create network objects for users. This way you can set rules for several users. The only condition for this is that the users are ***SPUVA*** (Securepoint Security User Verification Agent) user and employ the agent to log onto the system. The user must be listed in the user administration under the menu item ***Authentication*** in the entry ***Users***.

- Click ***Add User***. The dialog ***Add User*** appears.
- Under ***Name*** enter a name for the object.
- Under ***Login*** select a SPUVA user.
- Under ***Zone*** select the according zone.
- Select which ***NAT IP*** should be used.
- Store your settings with ***Save***.

fig. 92 create an object for an user

8.6.5 Add Interface

You can also add network objects for interfaces.

You distinguish between interfaces with static and dynamic IP-addresses.

- Click ***Add Interface***. The dialog ***Add Interface*** appears.
- Enter a name for the new object in the field ***Name***.
- Under ***Type*** select ***StaticAddress*** or ***DynamicAddress***.
  If you have chosen ***StaticAddress***, you have to enter the static IP-address in the field ***IP Address***.
- Under ***Zone*** select the zone of the interface.
- Store your settings with ***Save***.

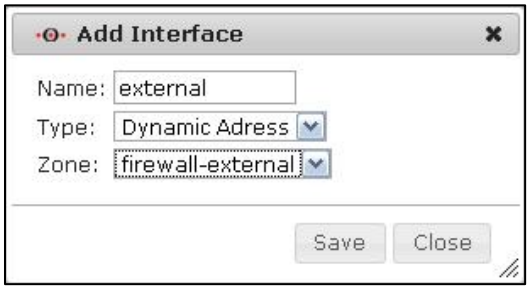


fig. 93 object of interface with dynamic address

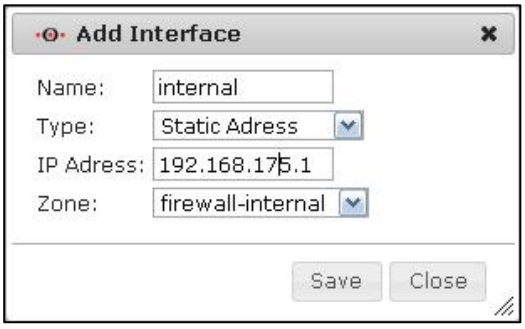


fig. 94 object of interface with static address

8.7 Network Groups

In this section you can subsume several network objects into groups. You can add new groups, edit and delete existing groups.

- Select an existing group from the dropdown field in the section ***Network Groups***.

  Click the ***trashcan symbol*** for deleting the group. All included network objects will be deleted too.
  Click the ***plus symbol*** to create a new group.
  Enter a name for the new group and select an icon for the group.
- In the table ***Network Objects*** all available network objects are listed.
- In the table ***Network Group Member*** all network objects are listed which are elements of the selected network object group.
- You can add network objects to the selected group by highlighting objects in the left table and click on the ***rightwards arrow button***.
  The selected network objects will be moved to the right table.
- You can delete network objects from the group by highlighting objects in the right table and click on the ***leftwards arrow button***.
  The selected network objects will be removed from the right table.

Note: Click on the button ***Update Rule*** to apply the network group changes to the rules of the portfilter.

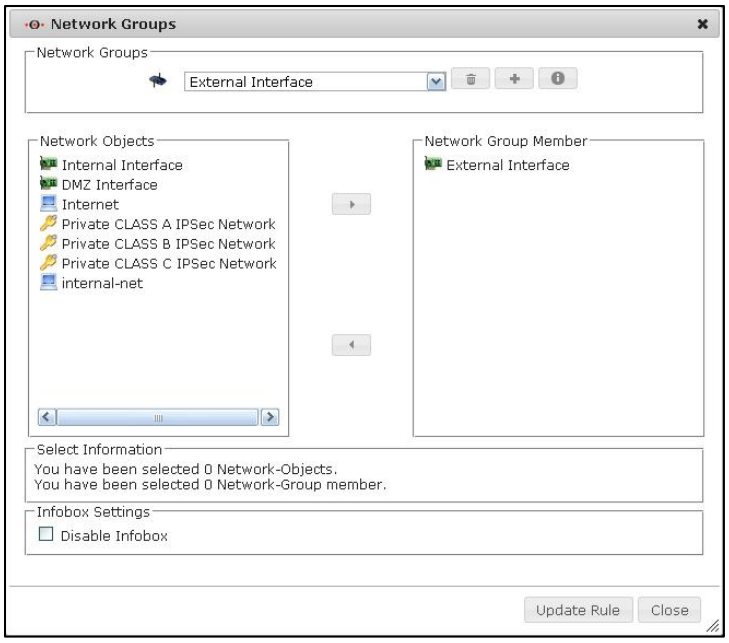


fig. 95 network groups dialog

8.7.1 Network Object Information

The function ***Infobox*** shows information of the network object if the mouse cursor rolls over it.

You can enable this function by unchecking the checkbox ***Disable Infobox***.

The infobox shows the name, IP address, subnet mask, zone and NAT IP.

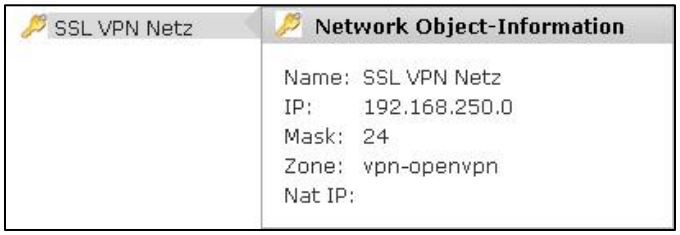


fig. 96 object information

8.7.2 Network Group Information

You can also retrieve information of network groups.

- Select a network group from the ***dropdown box***.
- Click on the ***information symbol*** behind the dropdown box.
  The infobox appears.

The infobox shows the name of the network group and if the group is used in a firewall rule. In this case the numbers and a summary of the firewall rules are shown.

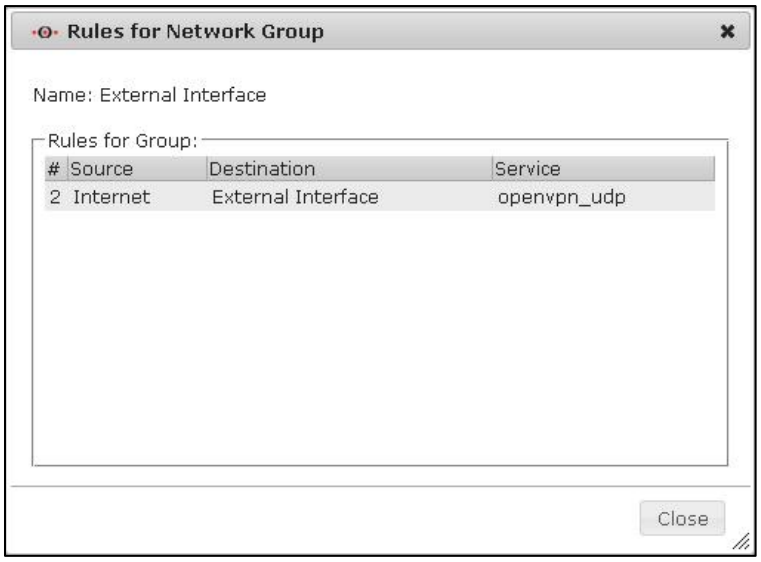


fig. 97 infobox for a network group

9 Menu Applications

In this menu item you will find the settings of the proxies for HTTP, POP3 and VoIP and also the settings of the remote control service VNC Repeater, the Mail Relay and the Spam Filter. Furthermore you can switch the status of the services.

fig. 98 dropdown menu applications

name	description
HTTP Proxy	General settings of the proxy. Furthermore virus scanning, filtering of internet addresses and website content.
POP3 Proxy	Spam filtering and virus scanning of e-mails.
Mail Relay	Settings of the mail server.
Spamfilter Properties	Settings of the spam filter.
VNC Repeater	Forwarding of remote control programs.
VoIP Proxy	Settings of the voice over IP proxy.
IDS	Signatures of the intrusion detection system.
Service Status	Activate and deactivate services.

9.1 HTTP Proxy

The HTTP proxy is set between the internal net and the internet. It analyzes content of internet sites, blocks suspicious websites and checks data for viruses.
The client sends his query to the proxy. The proxy gets the data from the internet, analyses it and sends it to the client. The proxy acts as an exchange agent. For the client the proxy acts as a server. For the server in the internet the proxy acts as a client.

9.1.1 General

On the tab General you can make basic settings for the Proxy.

- Setting up the ***port*** of the proxy. The default port is 8080.
- If you want to define the ***Outgoing Addr***ess enter the desired IP address.
- If you use another proxy, activate the checkbox ***Cascade***.
  In this case enter the IP address of the other proxy in the field ***Parent Proxy*** and the port in the field ***Parent Proxy Port***.
- Decide in which networks the proxy should be activated as a ***transparent proxy***. Transparent means that the proxy isn't visible for the user. You needn't insert the proxy settings in the browser. The firewall conducts the packets to the proxy automatically. But if you don't insert the proxy setting in the browser the user authentication fails and protocols like HTTPS and FTP must be activated by rules.
- Under ***Exceptions*** enter subnets and IP addresses which should be except from the proxy redirect. Source and destination addresses must be specified for these exceptions.
- Select an authentication mode.

None	→	no authentication
Local	→	authentication against the local user database
Radius	→	authentication against a Radius server
Active Directory	→	authentication at the AD of the network
NTLM	→	authentication against the NT LAN manager Click the button Settings to define if all users or just a defined group are allowed to authenticate.

- If you want to limit uploads and downloads activate the checkbox ***Enable Size Limit***. If you don't want to limit the upload or the download, activate the relative ***radio button unlimited***.
- The ***Anonymize Logging*** logs without user name and IP address.

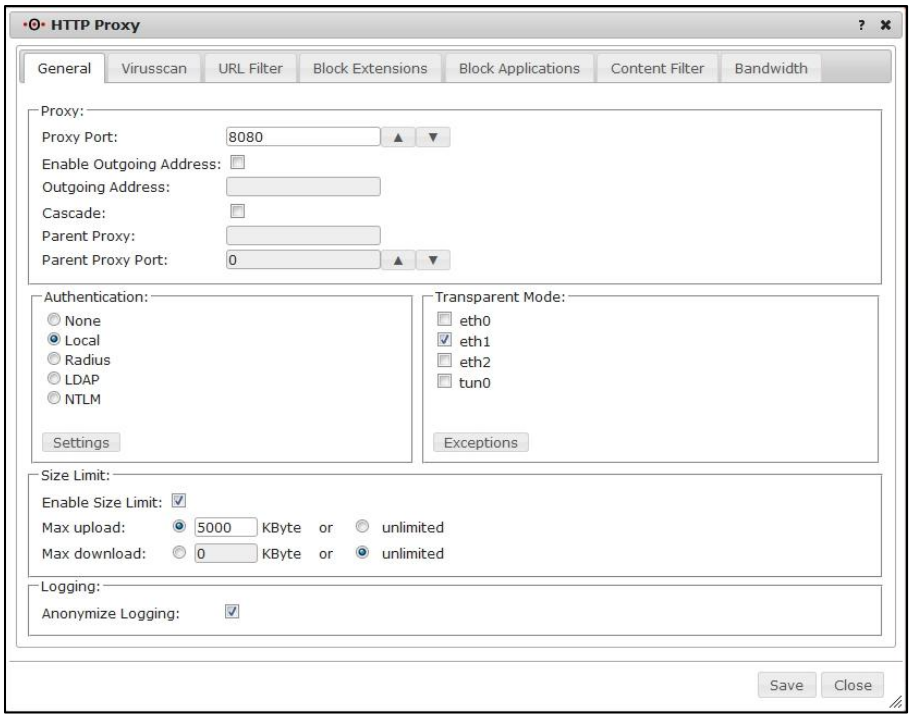


fig. 99 HTTP proxy settings - tab general

When you define exception for HTTP proxy the relevant computers will access the internet directly, if an accordant rule exists.

The exceptions must be defined by source and destination IP addresses.

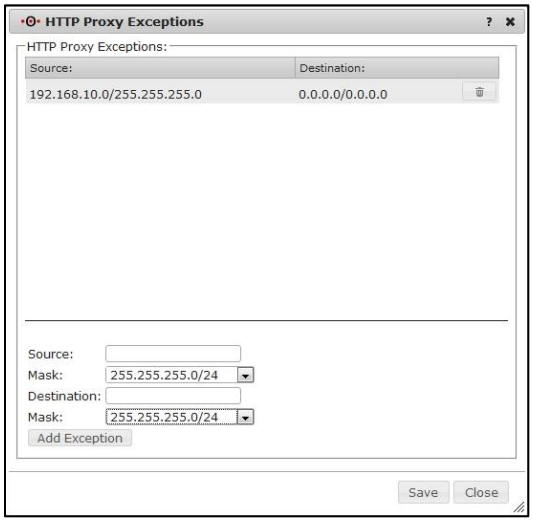


fig. 100 define exceptions for the HTTP proxy

9.1.2 Virus scanning

In this tab you can set which files and websites should be ignored by the virus scanner.

- You can deactivate the virus scanning by unchecking the checkbox ***Virus scanner***.
- The left list shows file extentions, which are excluded by the virusscanning.
  You can edit the entry by clicking the ***wrench symbol***. You can delete the entry by clicking the ***trashcan symbol***.
- Enter a file extenstion leading by a dot in the field under the left table and click ***Add Extension*** to add an entry***.***
- The right list shows websites which are excluded by the virus scanner.
  You can edit the entry by clicking the ***wrench symbol***. You can delete the entry by clicking the ***trashcan symbol***.
- Enter a website in the field under the right table and click ***Add Website*** to add an entry***.***
  Host names like „www“ are not declared.

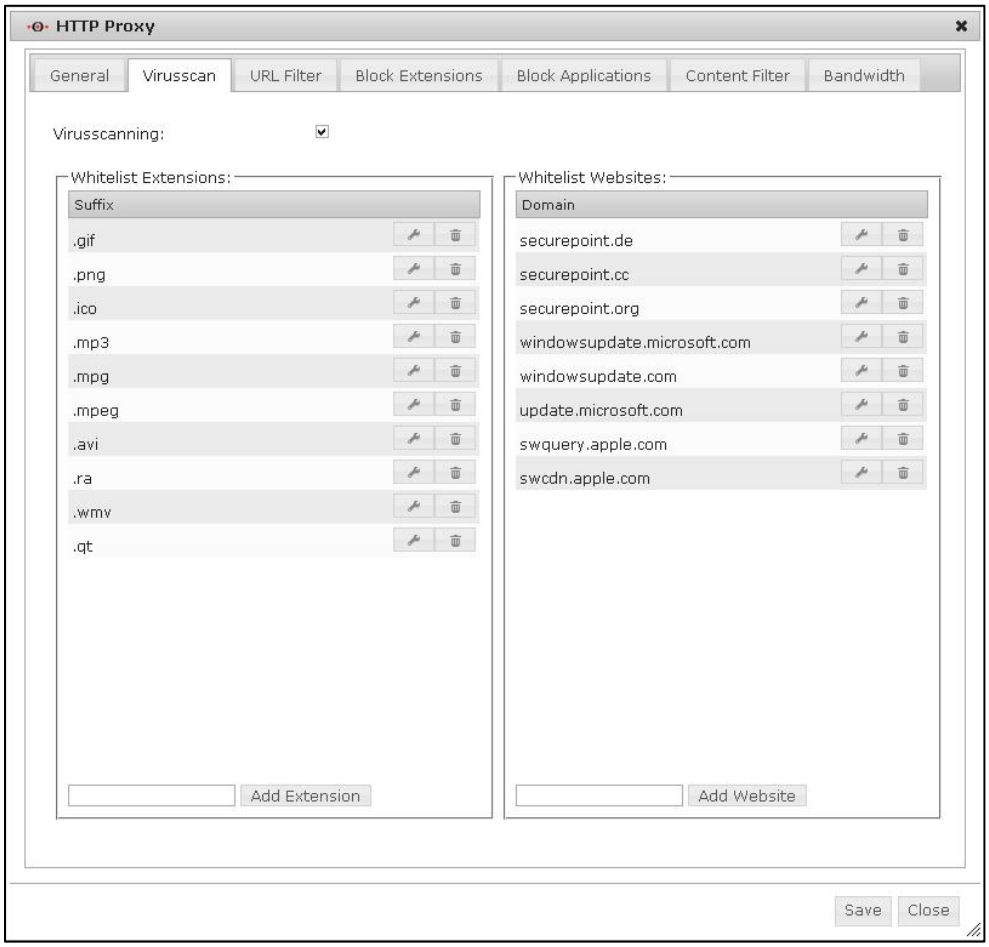


fig. 101 HTTP proxy dialog - tab virus scanning

9.1.3 URL Filter

With the URL filter you can block the access to websites by defining the URL. The filter is adjustable by two lists. The blacklist contains URLs of blocked websites. The whitelist contains addresses of allowed websites.
If you select an authentication mode on the tab ***General,*** websites on the blacklist are visible for authenticated users. If you want to use the blacklist for all users, activate the option ***Use lists with authentication***.

- Switch to the tab ***URL Filter***.
- Enable the filter by activating the checkbox ***URL Filter***.
- Activate the option ***Use lists with authentication*** to block sites from the blacklist universally.
- You can edit the entries by clicking the related ***wrench symbol***. You can delete the entries by clicking the related ***trashcan symbol***.
- Add entries to the lists by entering an address into the field under the tables and click the button ***Add Blacklist*** or ***Add Whitelist***.
- You can block or approve whole domains with all subpages.
  For blocking or approving defined websites enter the relatie URL.
  Furthermore you can block domains and approve subpages of this domain.
  For example:

blacklist:	time.com
whitelist:	time.com/business

- Just use top- and second-level-domains.
  For example:

www.example.com	becomes	example.com
www.example.com/auctions	becomes	example.com/auctions

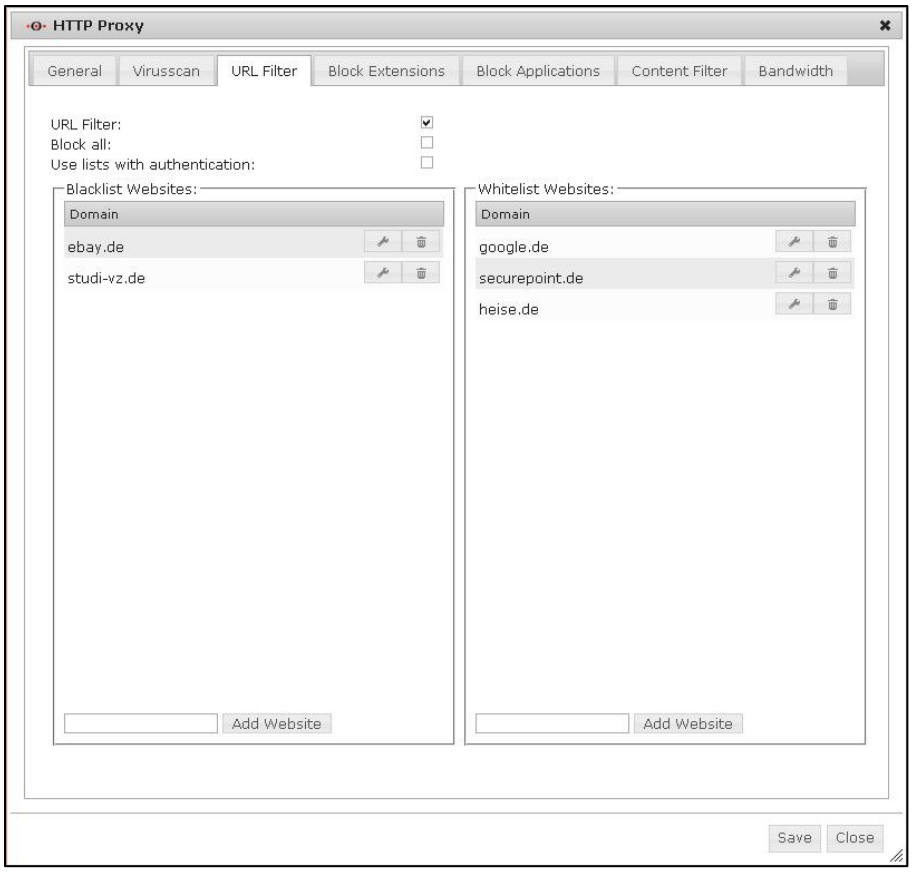


fig. 102 HTTP proxy dialog - tab URL filter

9.1.4 Block Extensions

On this tab you can define file extensions which will be blocked. Not only suffixes with three characters are supported. You can also block suffixes like ***jpeg*** or ***mpeg***.

Suffixes must be given with alleading dot.

- Enter the file extension in the field at the bottom of the window.
  Don't forget the leading dot. For example: ***.mp3***
- Click on ***Add Extension***.
  The extension is added to the list.
- To delete an extension from the list click on the trashcan symbol at the end of he related row.

fig. 103 HTTP proxy - tab block extensions

9.1.5 Block Applications

On this tab you can define remote support programs and messaging programs which will be blocked.
Note: These settings only work for the HTTP proxy. The programs could be executed via the rule set without using the HTTP proxy. Possibly you have to modify the rule set to prevent the communication of these programs.

The applications are predefined. The section ***remote support*** includes the programs Temviewer and Netviewer. In the section ***messaging*** the most popular chat programs are predefined. You can also block messaging programs which are not listed with the option ***Block other IM***.

- Select a program from the list. Activate the related ***checkbox*** to block the program.
- Click ***Save***.

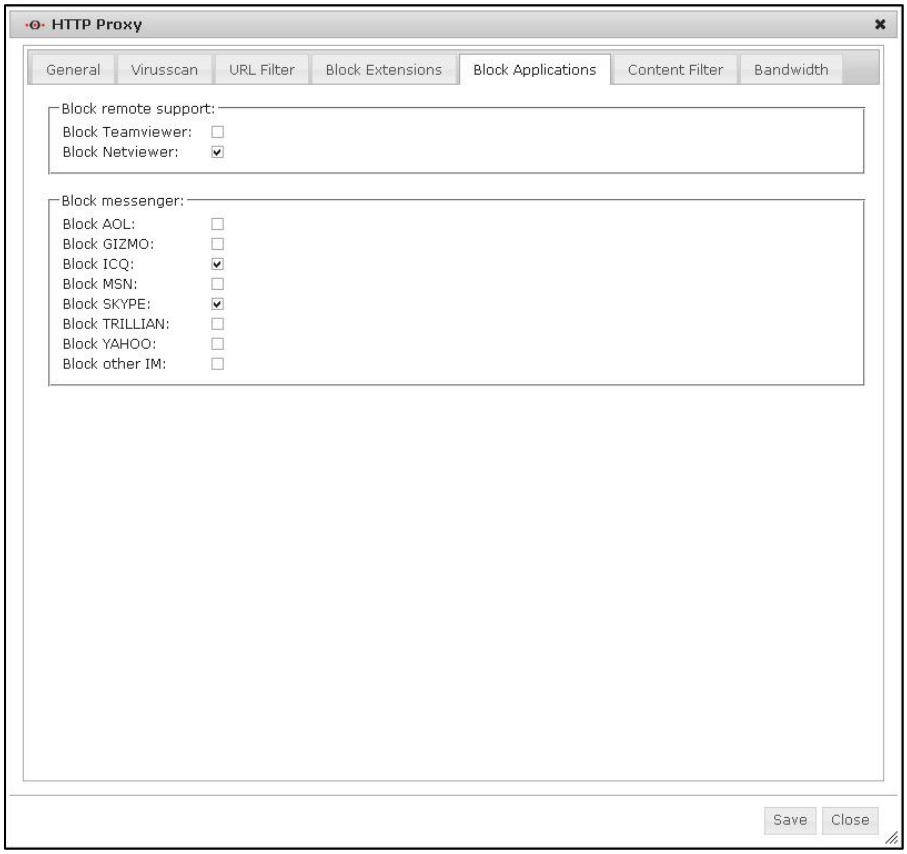


fig. 104 block remote support and messaging programs

9.1.6 Content Filter

9.1.6.1 Blacklist Categories

The Content Filter blocks websites with defined content. You can select from several predefined content categories. The categories contain tags and keywords which are characteristic for respective content. The keywords are weighted by their directness. If the sum of keywords exceeds a defined limit (Naughtylesslimit) the website will be blocked. The higher the Naughtylesslimit, the more improbable is the blocking of a website.

- Select the categories you want to block. Activate the related ***checkbox***.
- Define the threshold (***Naughtylesslimit***).
  Consider that a low threshold could block many sites which don´t meet conditions for the selected categories.
- Store your settings which ***Save***.

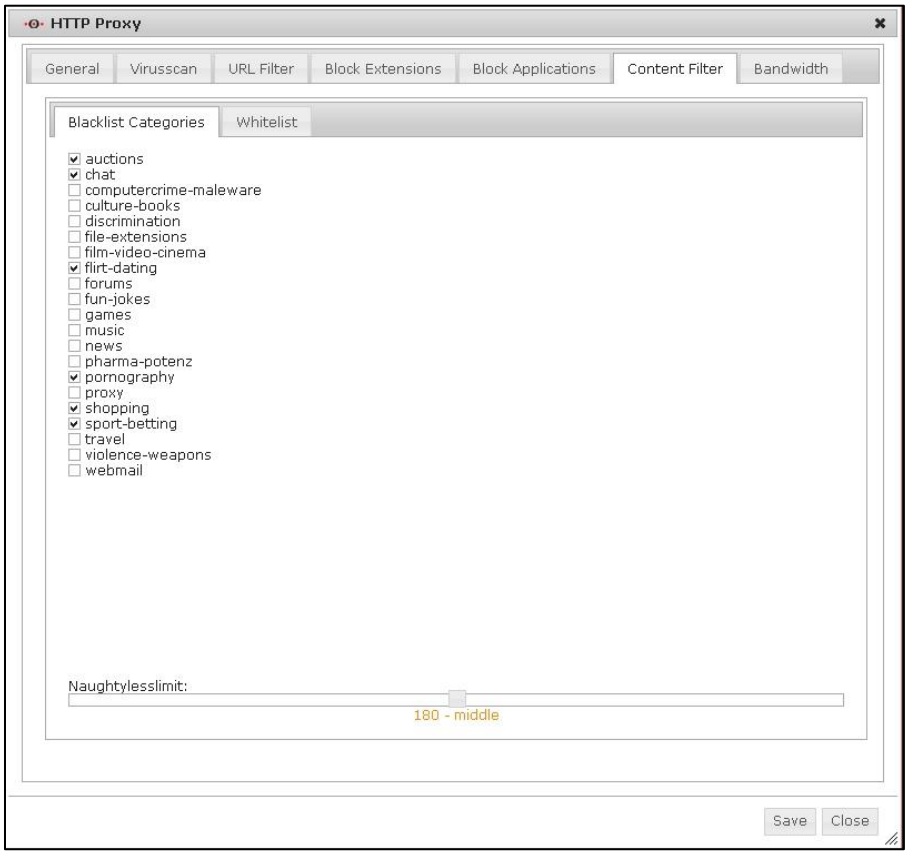


fig. 105 content filter of the HTTP proxy - tab blacklist categories

9.1.6.2 Whitelist

You can exclude users, IP-addresses and websites from the content filtering by the whitelist.

9.1.6.2.1 User

Users who are listed in this table can call up websites without being limited by the content filter.

- Switch to the tab ***Whitelist***. Select the tab ***Users***.
- Enter the ***login name*** of the user who should be excluded from the content filtering. Click the button ***Add User***.
- To delete a user from the list click the ***trashcan symbol*** in the related row.

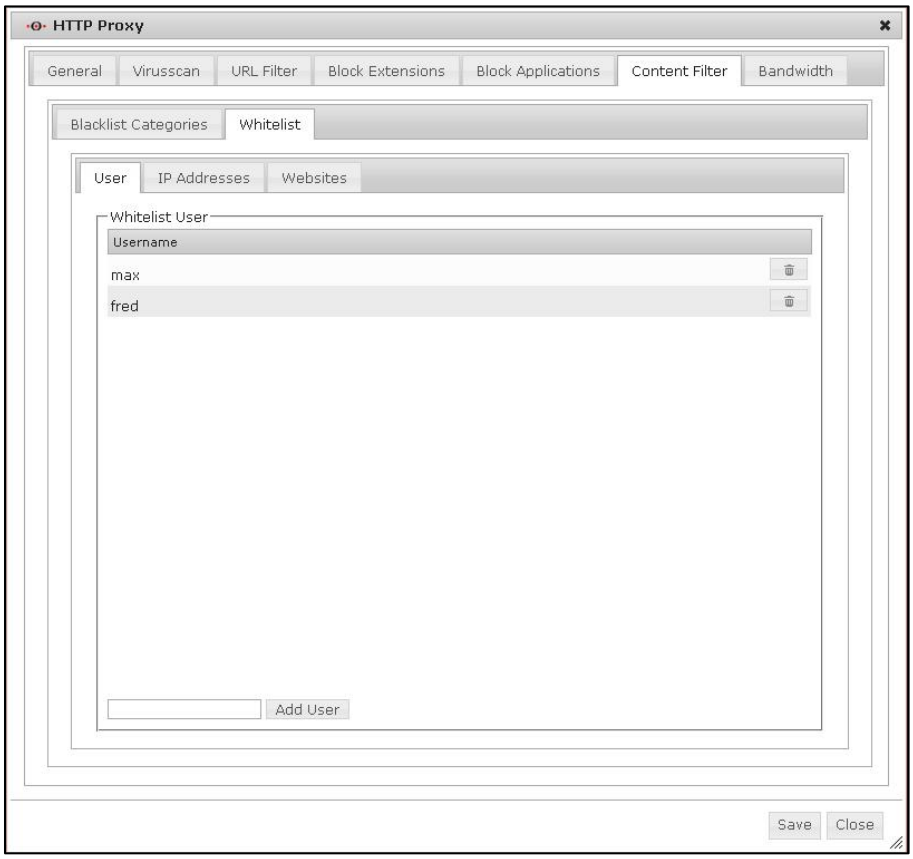


fig. 106 contentfilter of the HTTP proxy - section whitelist - tab user

9.1.6.2.2 IP Addresses

IP-addresses can be excluded from the content filtering as well.

This only makes sense if the IP addresses are assigned statically.

- Switch to the tab ***IP Addresses***.
- Enter the IP address which should be excluded from the content filtering. Click the button ***Add IP***.
- To edit an entry click on the ***wrench symbol*** beneath the related entry.
- To delete an entry click on the ***trashcan symbol*** beneath the related entry.

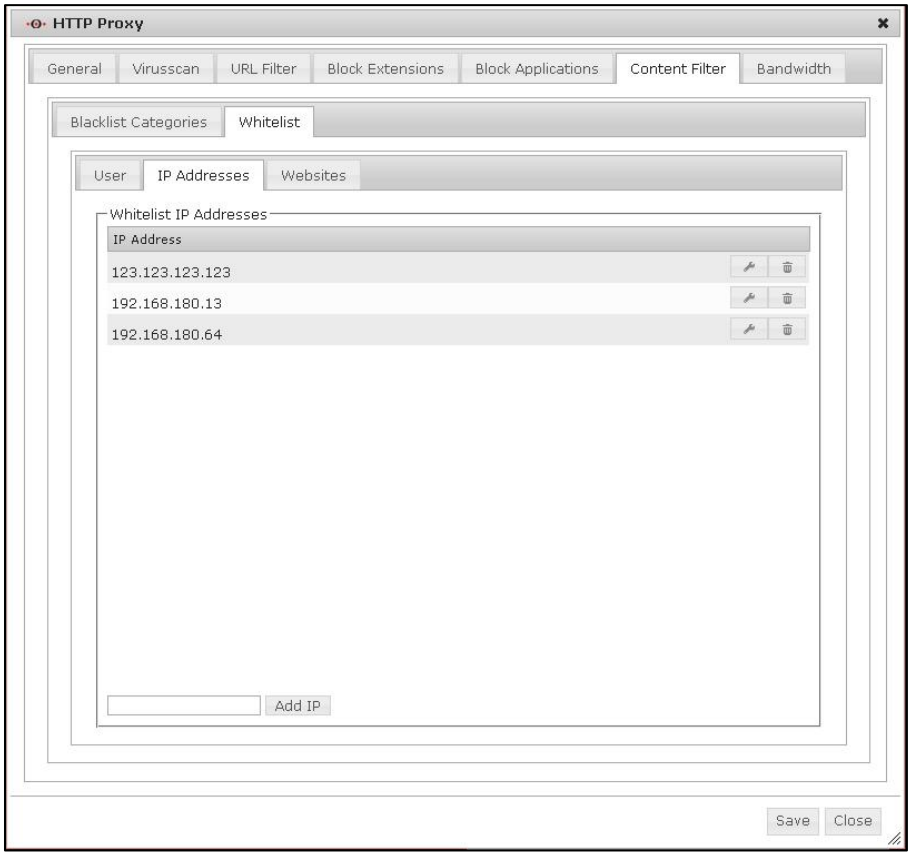


fig. 107 content filter of the HTTP proxy - section whitelist - tab IP addresses

9.1.6.2.3 Websites

In this section you can enter websites which will not be checked by the content filter.

Just insert absolutely trustable websites. Some entries are factory-provided.

- Switch to the tab ***Websites***.
- Enter addresses of websites which should be excluded by the content filtering. Click the button ***Add Website***.
- To edit an entry click the ***wrench symbol*** beneath the related entry.
- To delete an entry click the ***trashcan symbol*** beneath the related entry.

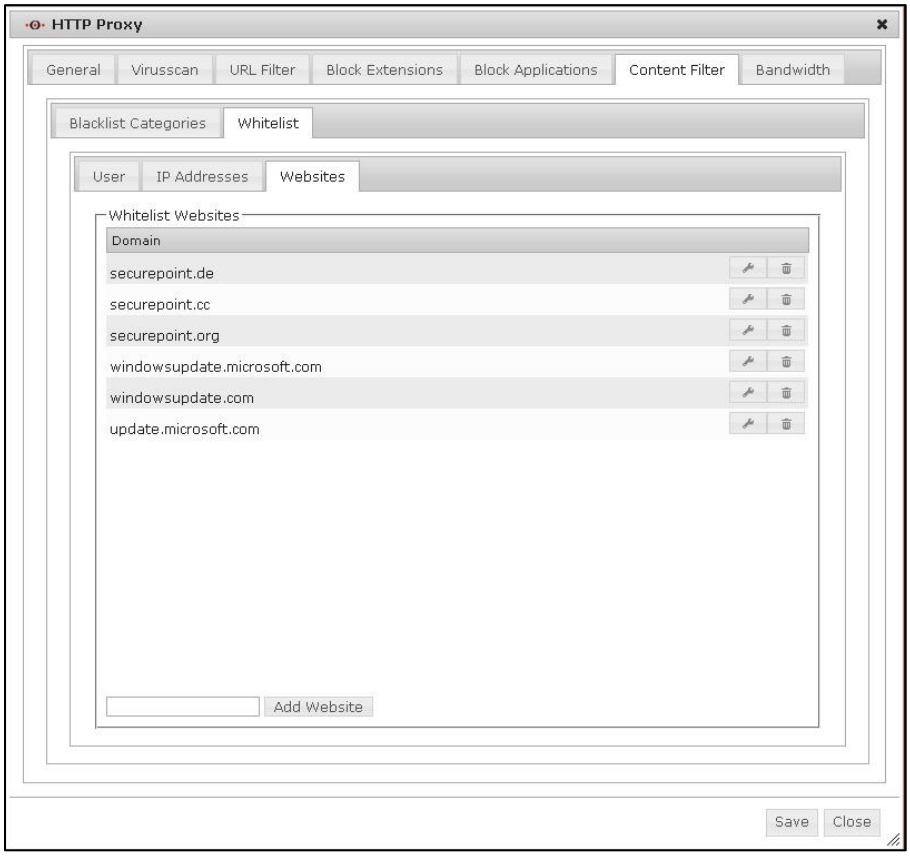


fig. 108 content filter of the HTTP proxy - section whitelist -tab websites

9.1.7 Bandwidth

You can limit the bandwidth globally or per host.

- Enable the bandwidth limitation by activating the checkbox ***Enable Bandwidth Control***.
- Select a ***global limitation*** or a ***limitation per host***.
  Activate the related ***radio button***.
- Enter a global limit in kilobit per second in the field ***Global Bandwidth***.
- Enter a host limit in kilobit per second in the field ***Bandwidth per Host***.
  The host just gets this bandwidth even if the global bandwith is not reached yet.

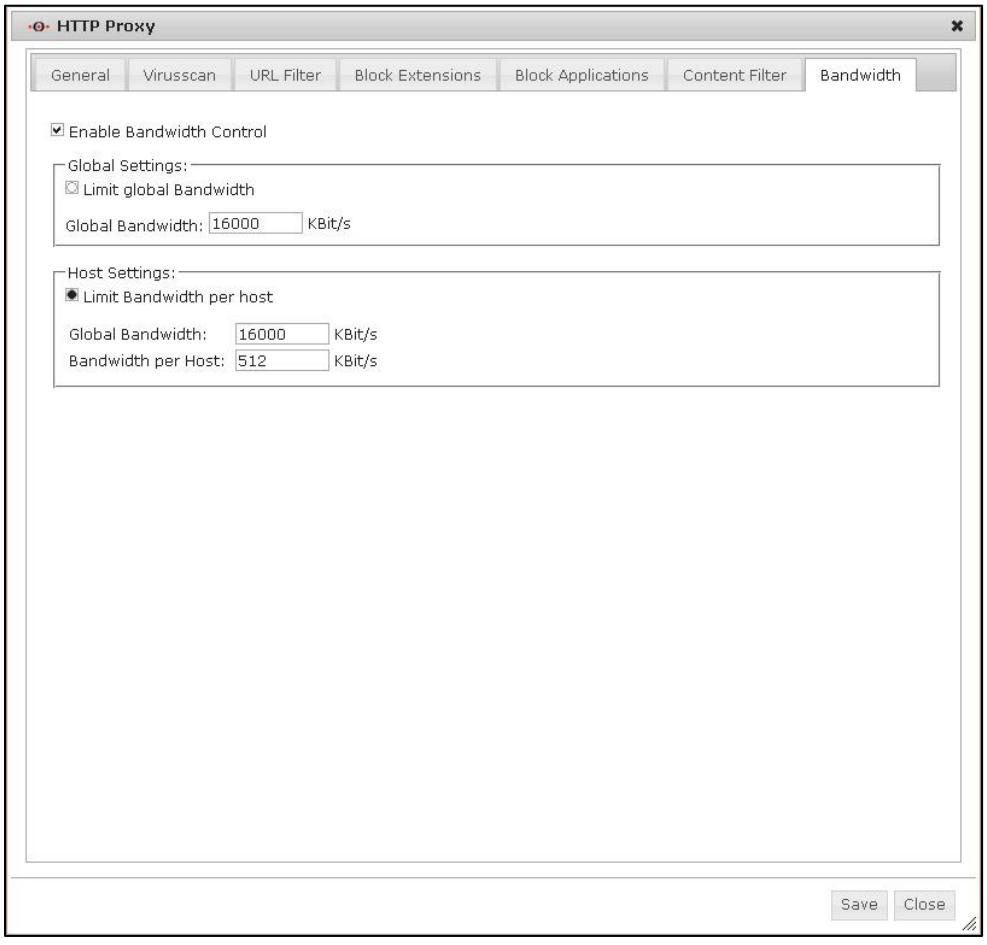


fig. 109 limit the bandwidth in the HTTP proxy

9.2 POP3 Proxy

The POP3 proxy acts as a POP3 server to the mail client and retrieves the e-mails from a mailserver in the internet. The e-mails are checked for viruses and spam and are send to the mail client.

- Select at ***Virusscanning*** the value ***On*** to activate the virus scanning.
- Select at ***Spamfilter*** the value ***On*** to activate the spam filter***.***
- Choose the net in which the ***Transparent Proxy*** should be activated.
- Store your settings with ***Save***.

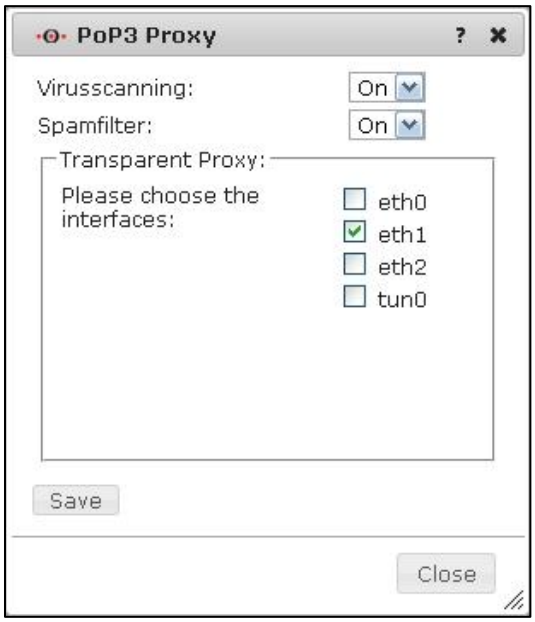


fig. 110 set properties for the POP3 proxy

9.3 Mail Relay

In this section you set properties for the e-mail service.

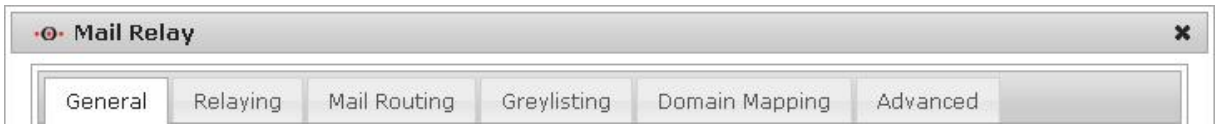


fig. 111 tabs of the mail relay

Bezeichnung	Erklärung
General	General settings for spam filter, virus scanner, e-mail administrator and maximum e-mail size.
Relaying	Allowed relaying hosts and domains.
Mail Routing	Defines which mail server supports which domain.
Greylisting	Mechanism against spam e-mails.
Domain Mapping	Changes the domain of e-mails.
Advanced	Settings for protecting the mailserver against attacks.

9.3.1 General

Set general setting of the mail relay and a Smarthost.

A Smarthost must only be set, if e-mails should not be send directly by the appliance.

- Set the dropdown field ***Virusscanner*** to ***ON*** to scan e-mails for viruses.
- Set the dropdown field ***Spamfilter*** to ***ON*** to check the e-mails for spam.
- Enter the e-mail address of the e-mail administrator in the field ***Postmaster E-Mail Address***.
- Limit the maximum size of an e-mail. Enter a value in kilobyte in the field ***Maximal E-Mail Size in KByte*** (maximum is 10.000.000 KByte).
  If you don't want to limit the e-mail size set the value to ***0*** .
- If you want to use a Smarthost activate the checkbox ***Enable Smarthost***.
- Enter the IP address or the host name of the external mail server in the field ***Smarthost***.
- If the external mail server requires an authentication, activate the checkbox ***Enable Smarthost Authentication***.
- Enter your user name and password into the fields ***Login*** and ***Password***. Confirm the password in the field ***Confirm Password***.

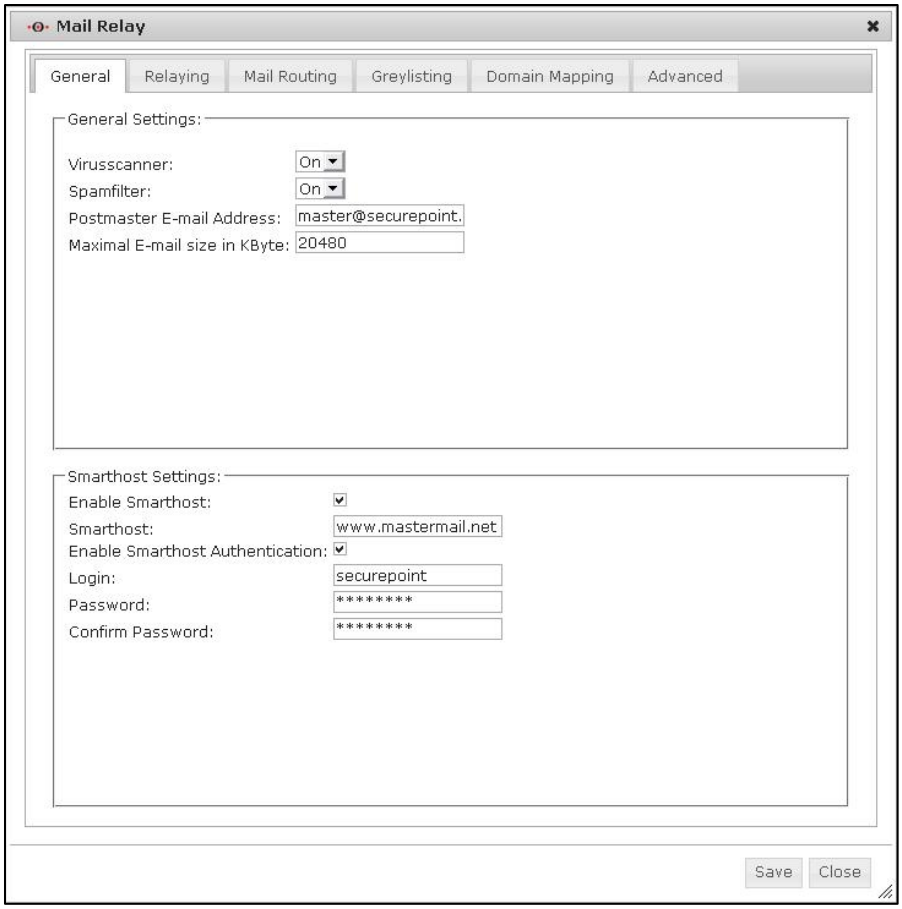


fig. 112 general settings for the mail relay and the Smarthost

9.3.2 Relaying

On the tab relaying you deside how to deal with e-mails of recorded hosts and domains. E-mails which are directed to your domain should be relayed to your internal mail server. If the internal mail server also uses the firewall for sending e-mails you have to enter it´s IP address.
You have the possibility to use relay blocking lists. In these lists computers are registered which are known for sending spam e-mails. With these lists, mailservers could be blocked which are listed misleadingly or their misuse was a long time ago.

You can also enable SMTP authentication for local users. The selected certificates are used for encryption of the data traffic.

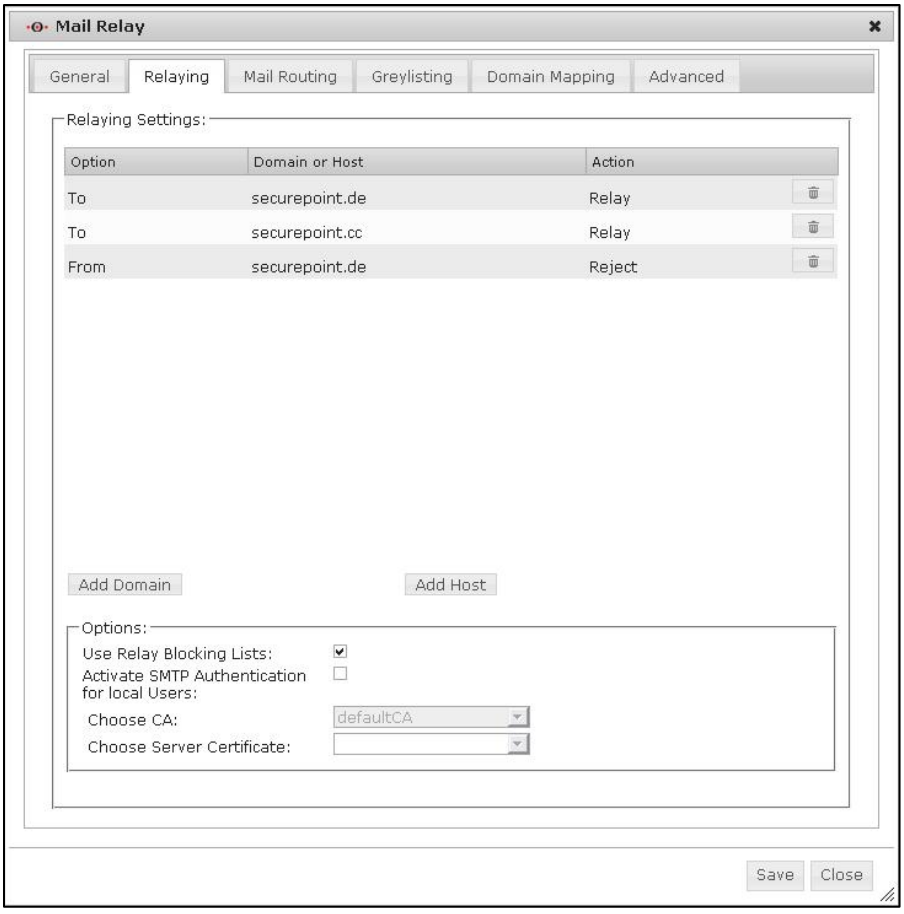


fig. 113 relaying settings

- To add a domain, click ***Add Domain***.
  The dialog ***Add Realy Domain*** appears.
- Enter a domain in the field ***Domain***.
- Select ***None***, ***To***, ***From***, ***Connect*** in the dropdown field ***Option***.
- In the field ***Action*** choose between ***Relay (forward), Reject (block)*** and ***OK (accept).***
- Click ***Add***.

- To add a host, click ***Add Host***.
  The dialog ***Add Host or IP Address*** appears.
- Enter a host name or an IP address into the field ***Host or IP Address***.
- In the field ***Action*** choose between ***Relay, Reject*** and ***OK***.
- Click ***Add***.

fig. 114 add domain

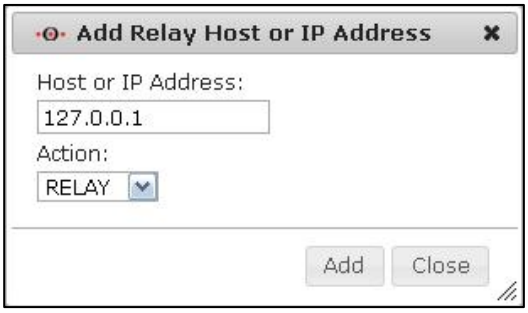


fig. 115 add IP address

9.3.3 Mail Routing

The mail routing defines which mail server is responsilble for e-mail adresses in which domain.

You can activate an e-mail validation against different databases or against a local file. E-mail to addresses which don´t exist will be directly rejected by the mail relay.

- To enable the e-mail validation, activate one checkbox ***Validate E-mail addresses against Mailserver with …*** .
- You can use the addresses of the ***LDAP*** directory or the ***SMTP*** server checks the existence of the addresses.
- Furthermore you can upload a file with e-mail addresses. The validation can be made against this file with the option ***Validate E-mail addresses against Mailserver with local file***. The file contains one e-mail address per row. You can edit the file from here with the button ***Edit e-mail addresses***.
  You also can download it with the button ***Download file***.

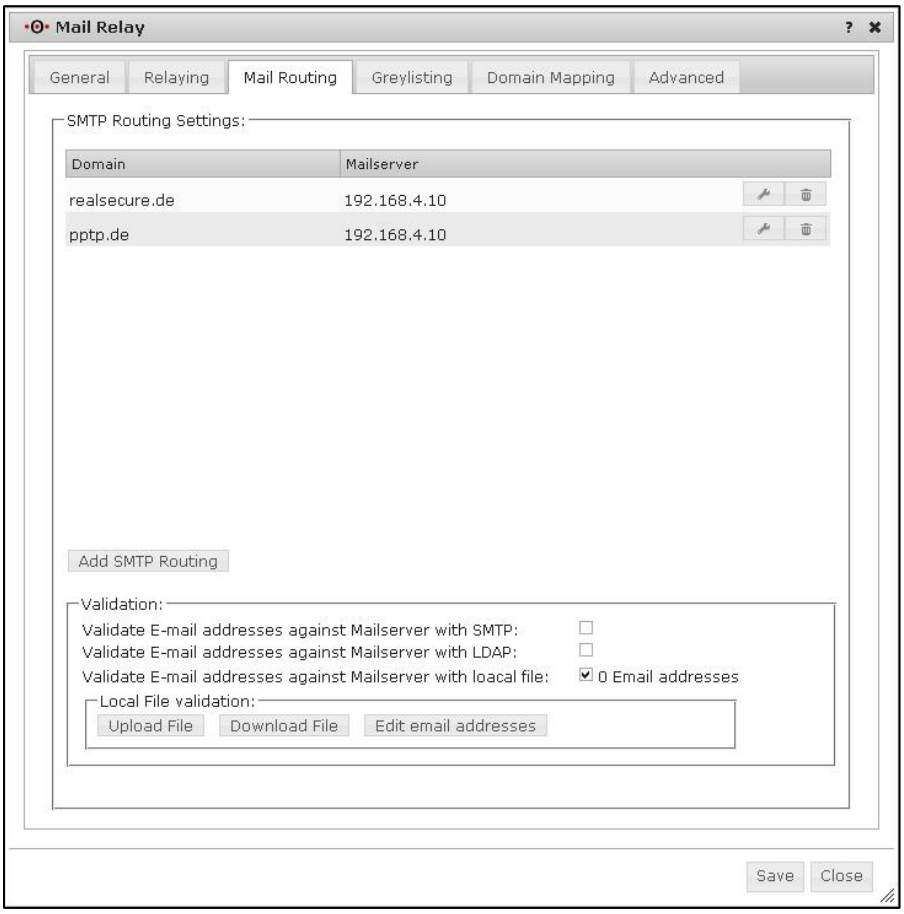


fig. 116 routing settings for the mail relay

- To assign e-mails of a domain to a defined mail server, click the button ***Add SMTP Routing***.
  The dialog ***Add SMTP Routing*** appears.
- Enter a domain into the field ***Domain***.
- Enter a host name or an IP address of the mail server into the field ***Mailserver***.
- Click ***Add***.

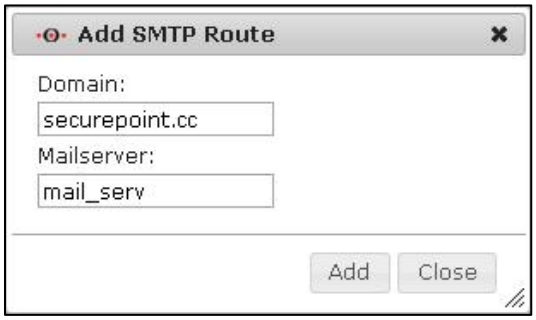


fig. 117 add route for the mail relay

9.3.4 Greylisting

The greylisting controverts spam by rejecting e-mails with unknown combinations of sending mail server, address of the sender and address of the recipient. A spam mail server will not retry to deliver the mail. A normal mail server will do. When the mail comes the second time, the relay will accept it.

- Enable the greylisting by activating the checkbox ***Enable Greylisting***.
- The mail relay stores the combination of server, sender and recipient automatically if the mail arrived a second time.
  Enter in the field ***Auto Whitelisting*** the number of days the combination should be stored.
- Define the time interval between the delivery attempts. Enter the number of minutes into the field ***Delaying***.

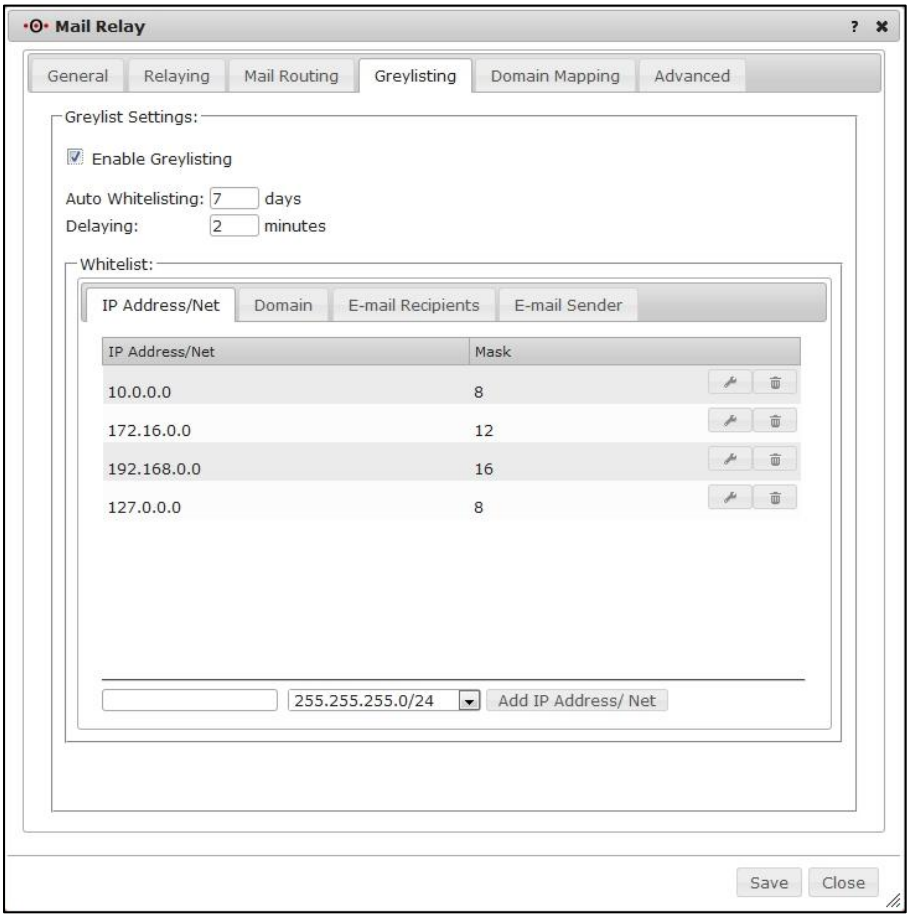


fig. 118 greylisting settings

9.3.4.1 Whitelist IP address / Net

In the whitelist you can define e-mails which should be excluded from the greylisting. They will be forwarded at the first delivery attempt.

In the section IP Address / Net you can exclude e-mails from the greylisting which come from defined IP addresses and networks.

- Enter an ***IP address*** into the field at the bottom of the window.
- Select the related ***subnet mask*** from the dropdown field.
- Click ***Add IP Address / Net***.
  The IP address will be saved in the whitelist.

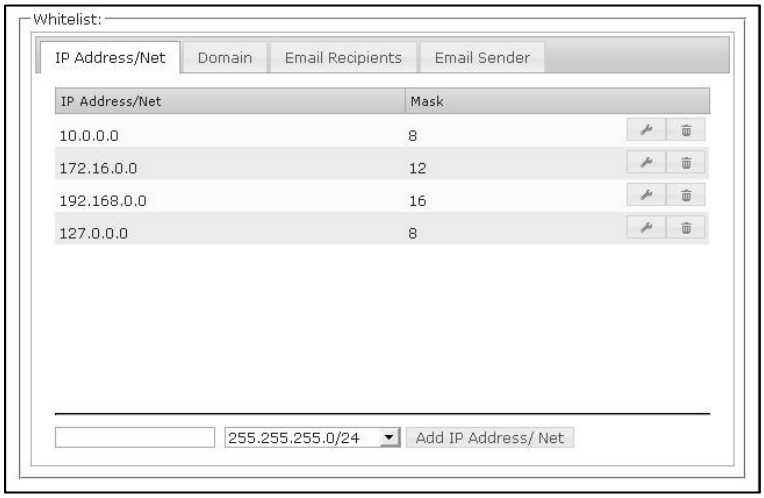


fig. 119 Whitelist - IP Addreses / Net

9.3.4.2 Whiteliste Domains

You also can exclude e-mails from the greylisting which comes from defined domains.

The specifcatons are only made in second- and top-level domains.

- Enter a ***domain*** in the field at the bottom of the window.
- Click the button ***Add Domain***.
  The domain will be saved in the whitelist.

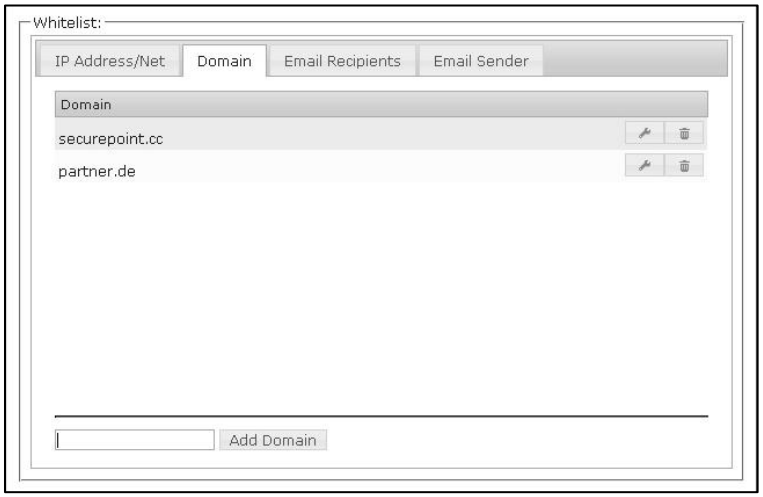


fig. 120 Whitelist - Domain

Note: The domain isn't the domain of the e-mail address, but the domain of the mail server which delivers the e-mail.

9.3.4.3 Whitelist E-mail Recipients

Exclude e-mails to defined recipients from the greylisting.

- Enter the ***e-mail address of a recipient*** into the field at the bottom of the window.
- Click ***Add E-mail Recipient***.
  E-mails which are delivered to this recipient will be excluded from the greylisting.

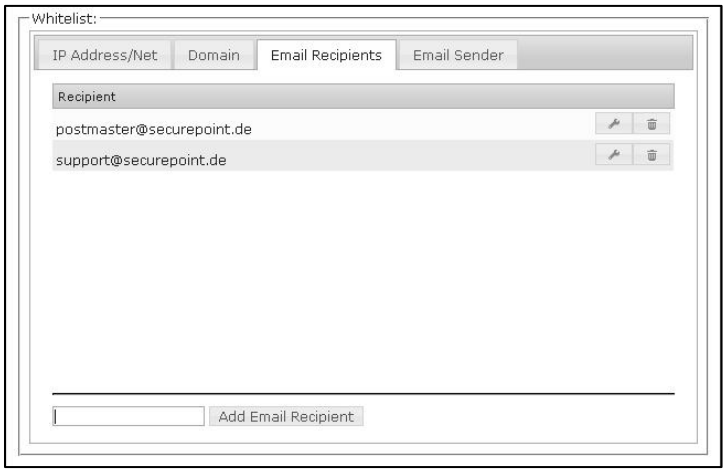


fig. 121 exclude e-mail recipients from the greylisting

9.3.4.4 Whitelist E-mail Sender

Exclude e-mails from defined sender from the greylisting.

- Enter the ***e-mail address from a sender*** into the field at the bottom of the window.
- Click ***Add E-mail Sender***.
  E-mails which are delivered from this sender will be excluded from the greylisting.

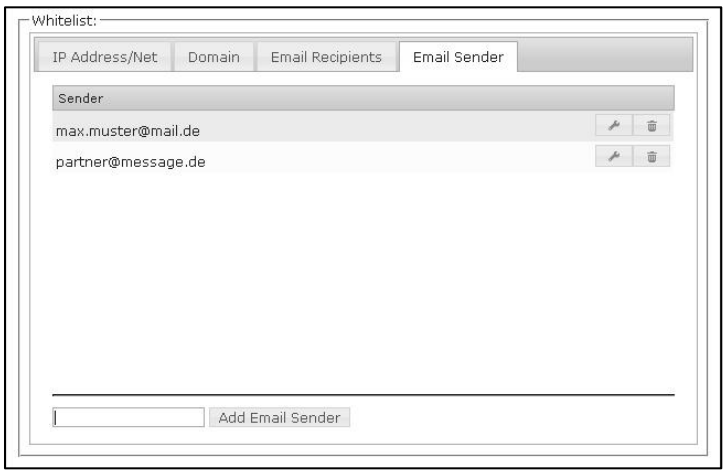


fig. 122 exclude e-mail sender from the greylisting

9.3.5 Domain Mapping

This function replaces the domains of e-mail addresses. So the internal mail server must only be configured for one domain.

For example:

bob@myhost.com becomes to *bob@myhost.de*

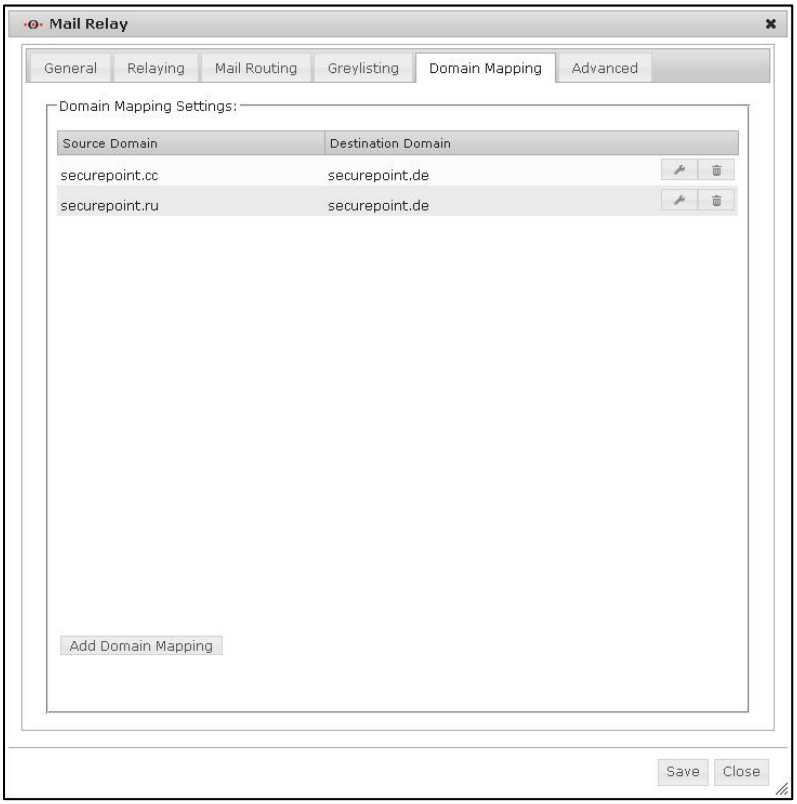


fig. 123 domain mapping settings

- To add a domain mapping rule, click the button ***Add Domain Mapping***.
  The dialog ***Add Domain Mapping*** appears.
- Enter the domain of the incoming e-mail in ***Source Domain***.
- Enter the new domain in ***Destination Domain***.
- Click ***Add***.

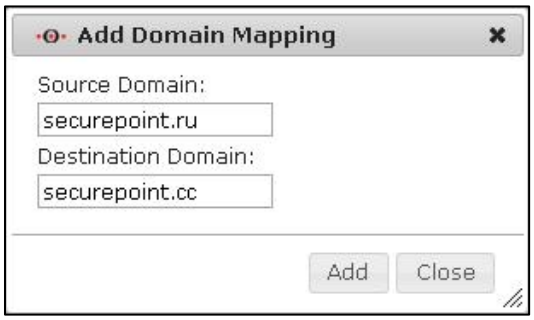


fig. 124 add a domain mapping rule

9.3.6 Advanced

This section offers settings that protect the mail relay with a basic mechanism.

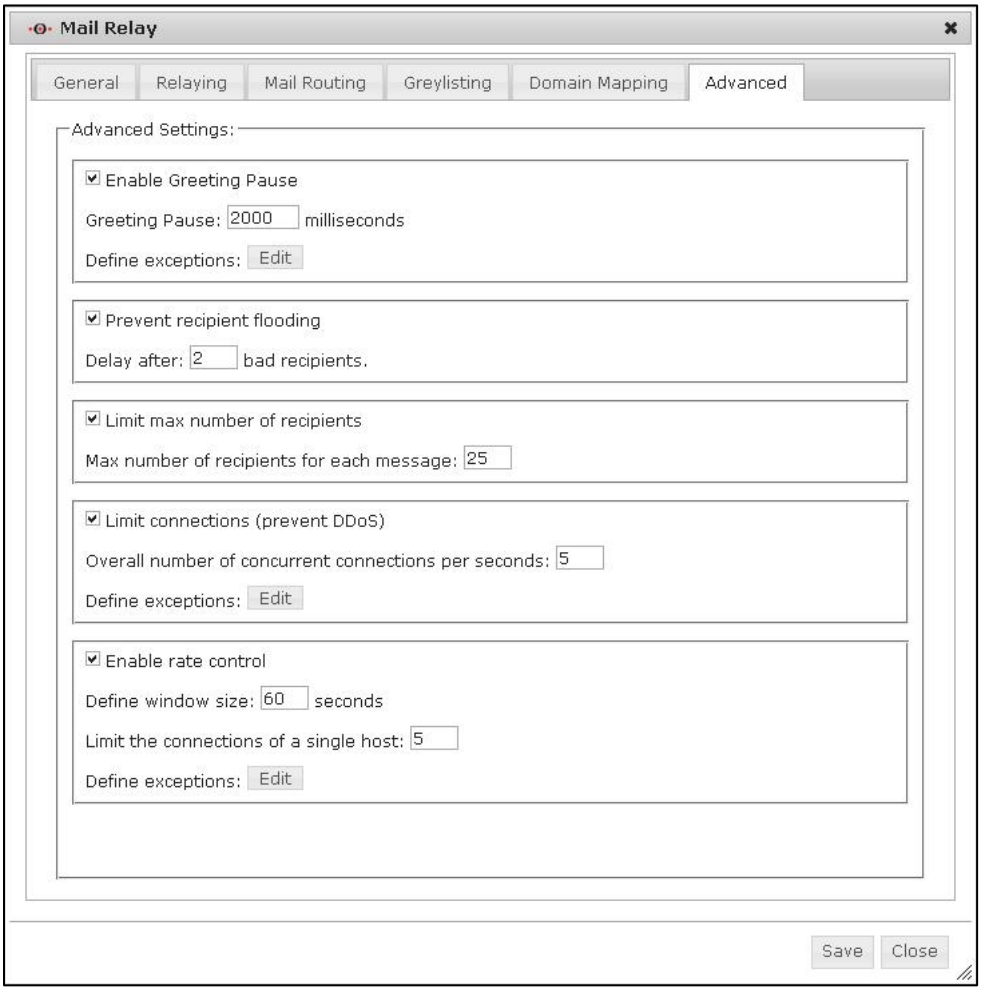


fig. 125 protecting mechanism on the tab advanced

9.3.6.1 Greeting Pause

Mail servers send a Greeting Message to the sending mail server. An uncorrupted mail server will deliver more SMTP commands after it gets this message.
Spam mail servers don't wait for this message and deliver the mail immediately. The mail relay drops e-mails if the Greeting Message rule has been ignored.

You can define mail servers that don't have to wait for the Greeting Message. Use the ***Edi***t button beneath ***Define Exceptions*** and enter the ***IP address*** or the ***host name*** of the mail server.

9.3.6.2 Recipient flooding

Refers to the sending of mails to a lot of recipients, at which the recipient addresses are composed randomly. After a defined number of failed delivery attempts a pause of 1 second will be made.
This slows down the query of e-mail addresses and it will be inefficient for the address collector.

9.3.6.3 Limit max number of recipients

Define a maximum number of recipients inside an e-mail.

9.3.6.4 Limit connections

Limits the simultaneous connections to your firewall per second.
You can define mail servers by IP address or host name which should be excluded from this limit.

9.3.6.5 Rate Control

Limits the simultaneous connections from one server in a interval of one minute (default). Exceptions can be defined.
You can define mail servers by IP address or host name which should be excluded from this limit.

9.4 Spam Filter Properties

The integrated Securepoint anti spam solution filters unrequested e-mails (spam). Therefore it uses a combination of different methods to detect as much undesired e-mails as possible. The Securepoint spam filter analyzes every e-mail on the basis of different criteria and classifies it as spam depending of the weighting. Assessment criteria are for example: obviously invalid sender address, known spam text passages, HTML content, future dated sender data and so on.

9.4.1 General

Decide which spam filter mechanism you want to use.
The automatic filter uses a spam filter module of the company Commtouch. The company services a consistently updated spam database. The incoming e-mails are checked against this database.
The Bayes filter checks on the basis of classified/evaluated words, if an e-mail is spam or ham (desired mail).
In order that the filter works properly, it must be trained by the spam administrator. The administrator has to resort the misclassified mail into spam and ham. Thereby the filter learns which words are typical for a spam e-mail.

- If you want to use the Commtouch module activate the checkbox ***Automatically Spam filtering***.
- Activate the checkbox ***Bayes Filter*** to use this filter mechanism.
  Set values for the following settings.
  - ***Threshold value for spam mail:*** The calculated value lies in the range between 1 and 99.
    1 shows a high probability for ham and 99 shows a high probability for spam.
  - ***Bias to define spam:*** Multiplier for words in the ham database.
    If there is much more spam than ham the values should be set to 1.
- Click ***Reset values*** to set the values back to default values.
- If the checkbox ***E-mail body invisible for the spam administrator*** is activated the spam administrator will only see the e-mail header in the spam filter interface. The content isn't visible for him.
  Consider the respective privacy regulations if you uncheck this option.
- Define how long the e-mails should be saved on the appliance. Enter the number of days in the field ***Keep e-mails not longer than x days***.

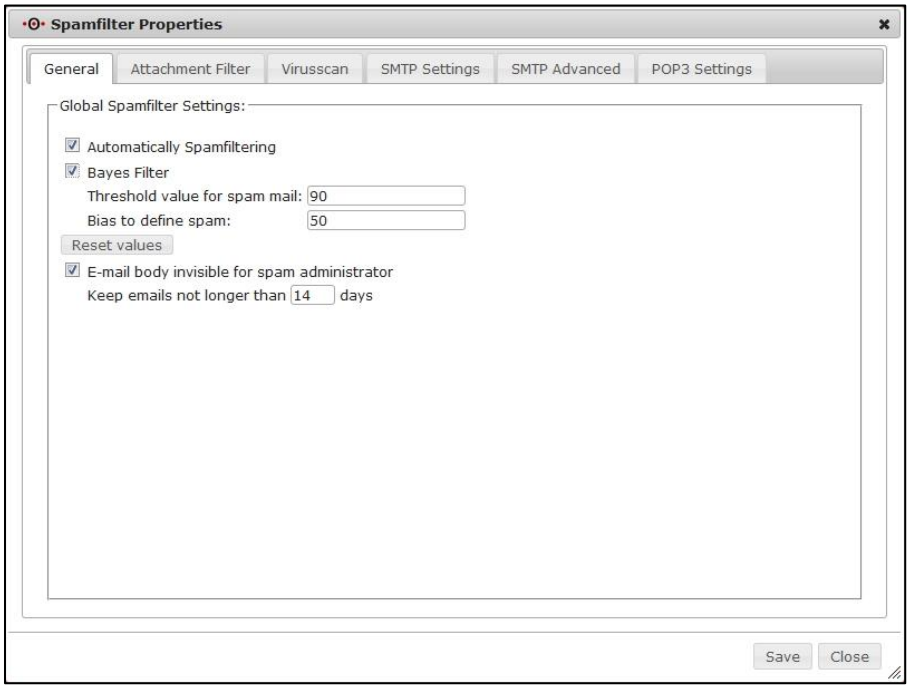


fig. 126 settings for filter mechanism

9.4.2 Attachment Filter

You can block attachments from incoming and outgoing e-mails. The filter can check all attachments or you limit the checking of a special attachment. You can define attachments by extension or MIME (Multipurpose Internet Mail Extensions) type which is given in the e-mail header.

- Either ***Block all Attachments***.
  You can exclude attachment by the ***Whitelist***.
- Or ***Block specific Attachments***.
  You have to define the attachments to be checked in the ***blacklist***.
- This filter doesn't block the e-mails. It just removes the attachments.
  If an attachment is removed, a message is inserted into the mail. You can edit this message in the field ***Edit Message***.

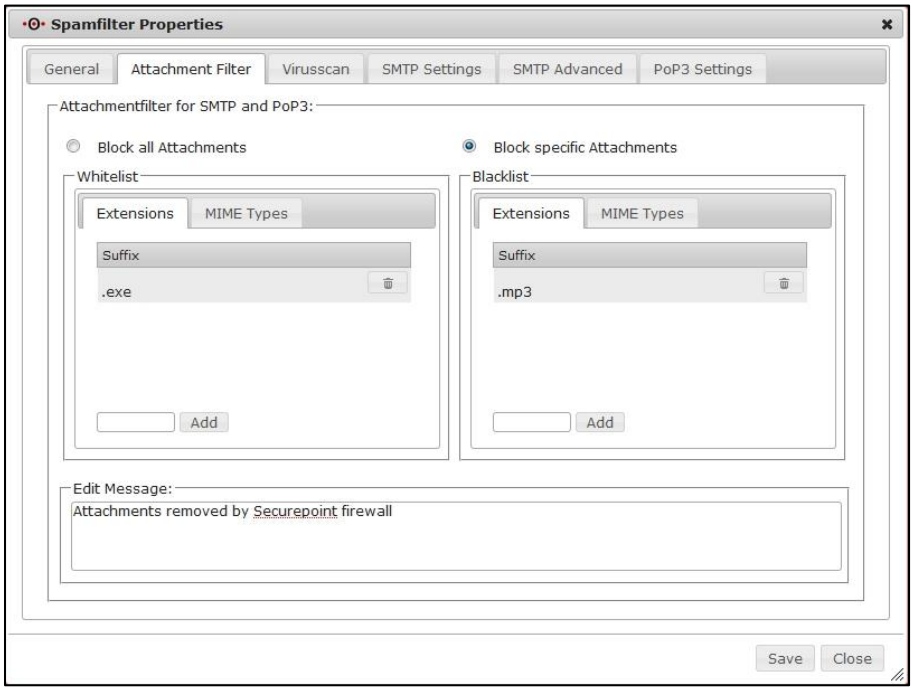


fig. 127 delete attachments from the e-mails

- You can write MIME types on your own (for example: audio/mp3) or you use predefined types.
- Switch to the tab ***MIME Types*** at the ***Whitelist*** or ***Blacklist*** section.
- Click the button ***Predefined***.
  The dialog ***Add MIME Type*** appears.
- Select a type by activating a ***radio button***.
- Choose a ***subtype*** from the relative ***dropdown list***.
- Click ***Add***.
  The MIME type will be added to the Whitelist or Blacklist.

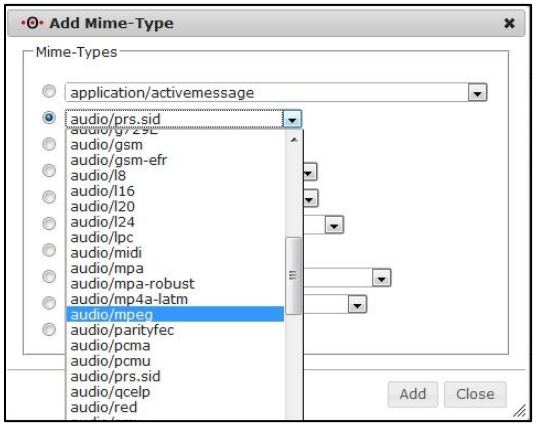


fig. 128 predefined MIME types

9.4.3 Virusscan

You can check incoming and outgoing e-mails for viruses. If a virus was found it will be deleted. The deleting of a virus from an e-mail will be indicated by a message in the e-mail.

- Activate ***Don't scan specific Attachments*** to exclude attachments from the virus scan by a Whitelist.
- Use the ***Whitelist*** to define attachments which should not be scanned.
  You can specify them by ***file extension*** or by ***MIME type***.
  You can write MIME types ***manually*** or select those from the ***predefined list*** (see previous article).

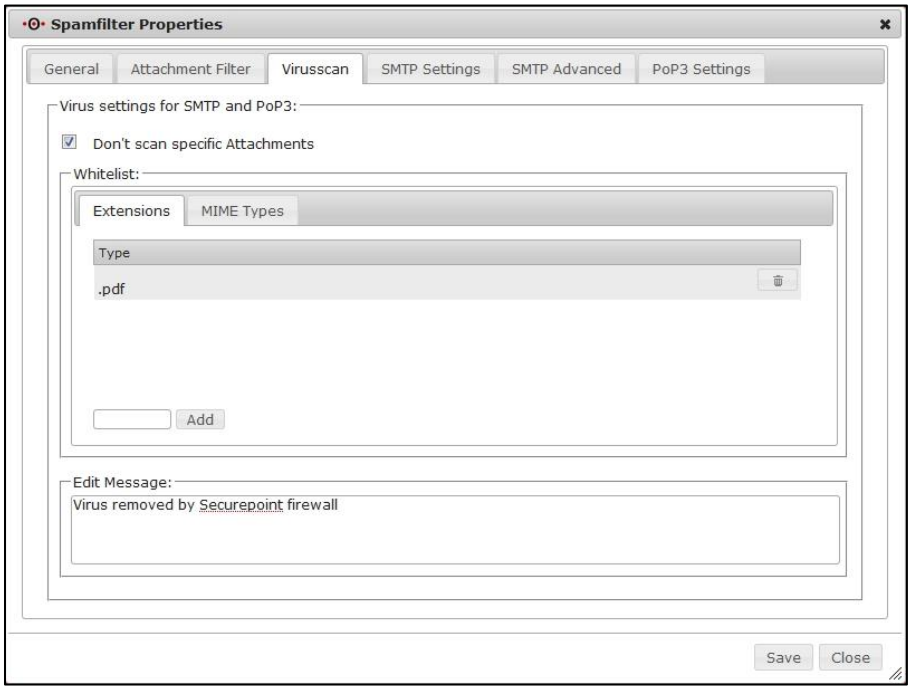


fig. 129 exclude attachments from the virusscanning

9.4.4 SMTP Settings

In this section you can define, how to deal with e-mails that are identified as spam, include a virus or an undesired attachment.

- If you don't want to block spam but mark it, activate the checkbox ***Don't block spam just mark***.
  You can edit the flag that is attached to the subject in the field ***Message in Subject***.
- Decide if ***incoming*** or ***outgoing*** e-mails with a ***virus*** will be ***blocked*** or ***relayed*** with deleted virus. Select the according radio buttons.
- Decide if ***incoming*** or ***outgoing*** e-mails with undesired attachment will be ***blocked*** or ***relayed*** with deleted attachment. Select the according radio buttons.

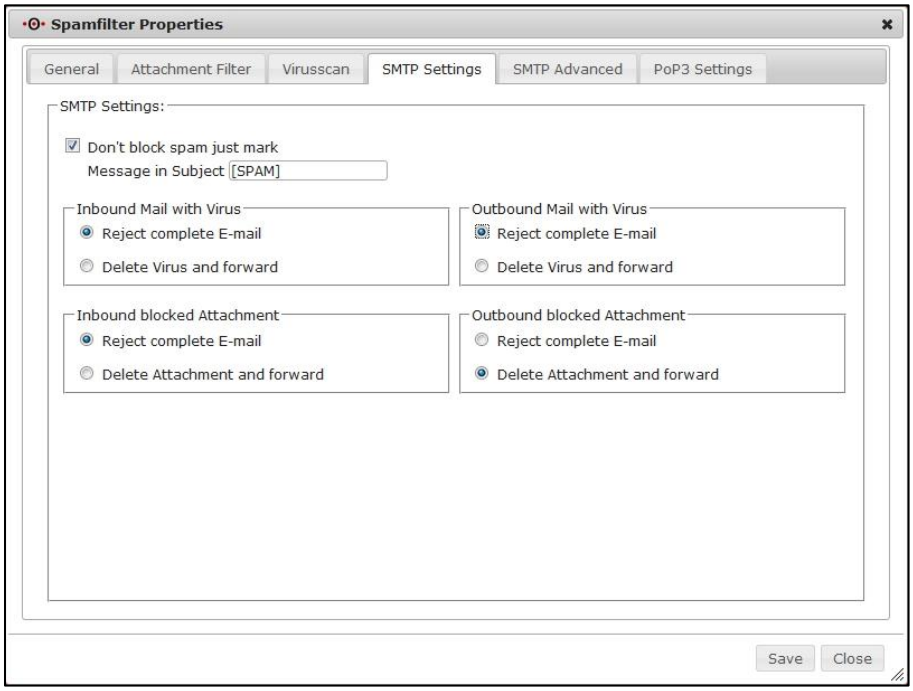


fig. 130 settings for identified e-mails

9.4.5 SMTP Advanced

In the advanced SMTP setting you can define a global Whitelist and a global Blacklist.
The entries in the list could be an IP address, a domain or a host IP address / host name.
E-mails from Whitelist entries will be relayed without checking. E-mails from Blacklist entries will be blocked without checking.

- Enter complete e-mail addresses on the tab ***E-Mail*** (Whitelist and Blacklist).
- Enter domains on the tab ***Domain*** (Whitelist and Blacklist).
- Enter host IP addresses or host names on the tab ***Host*** (Whitelist and Blacklist).

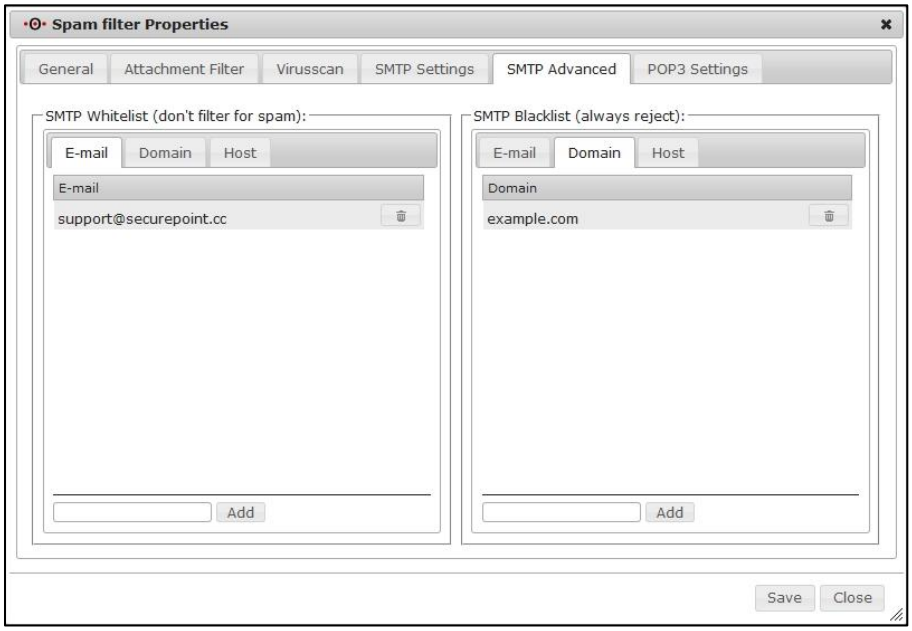


fig. 131 global Whitelist and Blacklist

9.4.6 POP3 Settings

Here you can define settings for the POP3 e-mail retrieve service. You can check all mail-boxes for viruses and undesired attachments or just specified mailboxes.

- The subject of spam e-mails will be tagged. Edit the tag in the field ***Edit message in subject when spam***.
- Decide on the left side if all mailboxes should be scanned for ***viruses*** or just specified ones.
  If you select the option ***specific mailboxes***, enter the ***user names*** whose mailboxes should be scanned.
- Decide on the right side if all mailboxes should be scanned for ***undesired attach-ments*** or just specified ones.
  If you select the option ***specific mailboxes***, enter the ***user names*** whose mailboxes should be scanned.

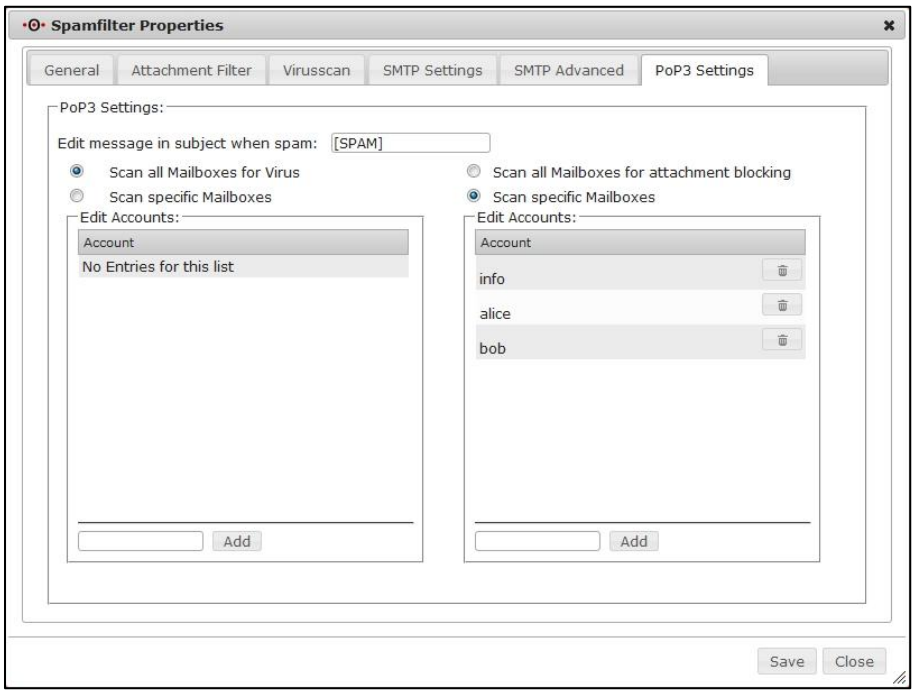


fig. 132 settings for POP3 service

9.5 VNC Repeater

Virtual Networking Computing (VNC) software can display the screen content of a remote computer on a local computer. The keyboard and mouse actions of the local computer are send to the remote computer. So you can work on the remote computer as though you work directly on it. The software is a client server application. The remote computer acts as the server and the local computer as the client. You have to enter the IP address or the host-name of the remote computer and the port of the VNC repeater application to allow the traffic through the firewall.

9.5.1 General

Specify the ports which are used by the client (viewer) and the server.

- Enter the port of the local VNC repeater at the field ***VNC Viewer Port***.
  Default setting is port 5900.
- Enter the port which is used by the remote VNC repeater at the field ***VNC Server Port***.

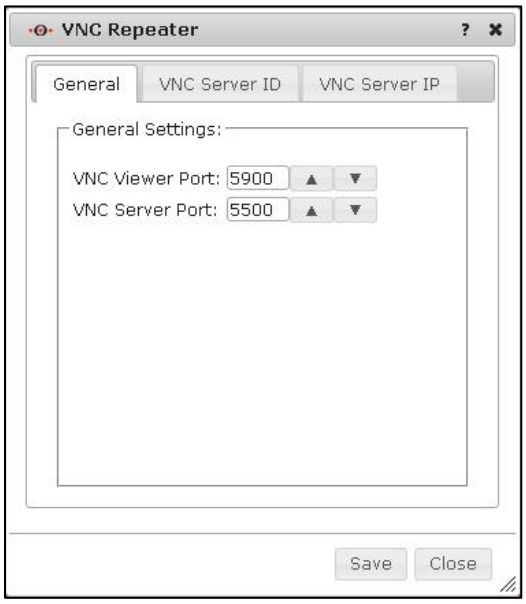


fig. 133 set ports

9.5.2 VNC Server ID

If the server connects the VNC proxy, an ID is assigned to the server. The client connects the server via the repeater and uses the ID to identify the Server.

- To add a ***Server ID*** type it into the field ID at the bottom of the dialog.
- Click ***Add***.
- Click the ***trashcan symbol*** beneath an ID to delete it.

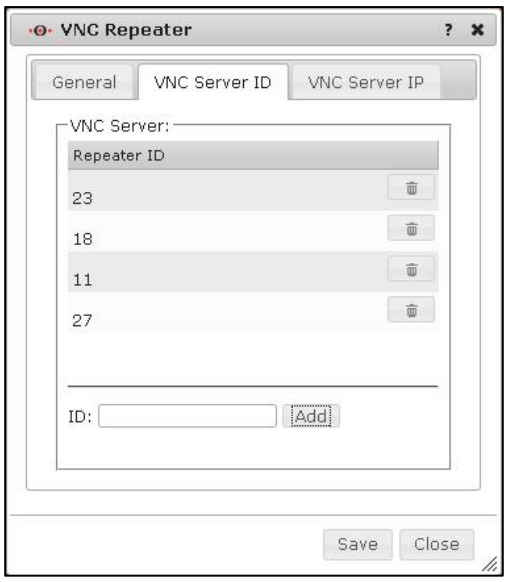


fig. 134 tab VNC Server ID

9.5.3 VNC Server IP

If the client initiates the connection, the VNC proxy forwards the query to the IP address of the server.

- To add a ***Server IP*** type it into the field IP at the bottom of the dialog.
- Click ***Add***.
- Click the ***trashcan symbol*** beneath an IP to delete it.

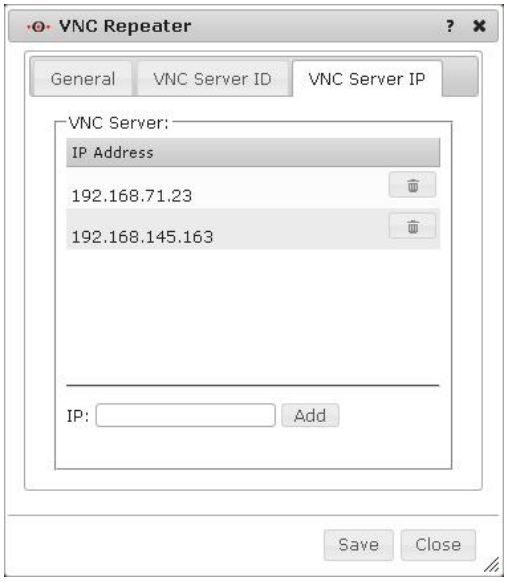


fig. 135 tab VNC Server IP

9.6 VoIP Proxy

The VoIP (Voice over IP) proxy offers packet based telephony over the internet.

It supports SIP (Session Initiation Protocol) for initiation of a communication session and RTP (Real-Time Transport Protocol) for broadcasting the speech data.

9.6.1 General

- Select the interface which is used by the SIP client to connect the proxy with the dropdown box ***Inbound Interface***.
- Select the interface which is used by the proxy to transfer the data to the internet from the dropdown box ***Outbound Interface***.
- Select the port on which the proxy expects data in field **SIP Port** (default 5060).
- Adjust the ***RTP Port Range*** to the port range used by the client.
- Enter the ***Timeout*** of the SIP server of the provider.

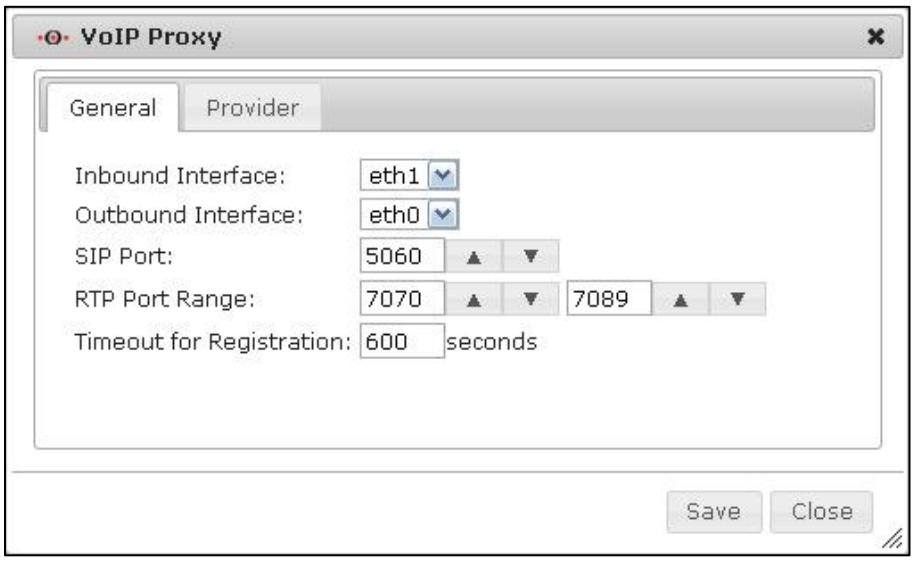


fig. 136 tab General of the VoIP Proxy dialog

9.6.2 Provider

Enter the data of the provider in this section.

- Enter the name of the provider in the field ***Domain***.
- Enter the SIP proxy of the provider in the field ***Proxy***.
- Select the SIP proxy port of the provider in the field ***Proxy Port*** (default 5060).

fig. 137 tab Provider of VoIP Proxy dialog

9.7 IDS

The Intrusion Detection System (IDS) is a system to detect attacks in the network. The IDS analyzes all packets which pass the appliance. Suspicious activities will be logged by the IDS.

The system checks the signature of every packet against known attack signatures which are stored in so called rules.

Notice:	Just activate rules which are applicable for your system. Otherwise the IDS stresses the system unnecessary.

- Select rules in the dialog ***IDS***. Activate the relative checkbox.
- Store your settings with ***Save***.
  The IDS service will be restarted.

fig. 138 select the signature classes

9.8 Nameserver

You have the possibility to forward requests to the local nameserver to external nameservers. The replies of the external nameservers will be transmitted to the requesting application or the requesting service.

- Select the menu item ***applications*** from the navigationbar and click on ***nameserver*** in the dropdown menu.
  The dialog ***Nameserver*** appears.
- Enter the IP address of the external nameserver into the ***field*** at the bottom of the dialog.
- Click ***Add IP Address*** to apply the nameserver to the list.
- You can delete listed nameserver by using the ***thrashcan*** button.
- Click ***Save*** to store the settings and leave the dialog.

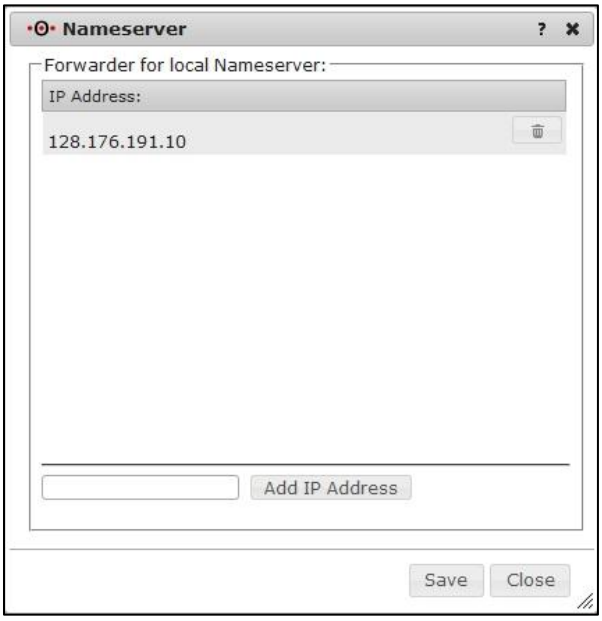


fig. 139 add external nameserver

9.9 Service Status

In this section all services of the firewall are listed. The current state of every service is shown. You can start, stop or restart the system.
If you use a high availability environment you can define which services are critical. This means, if the service crashes, the system will change to the spare machine. This setting is called Cluster Protection.

- An active service shows a green ***On*** button.
  An inactive service shows a red ***Off*** button.
- Start a service by clicking the button ***On*** in the related row.
  Stop a service by clicking the button ***Off*** in the related row.
  Restart a service by clicking the button ***Restart*** in the releted row.
- If you use a high availability environment set the ***Cluster Protection*** to ***On*** for services which should be available always.

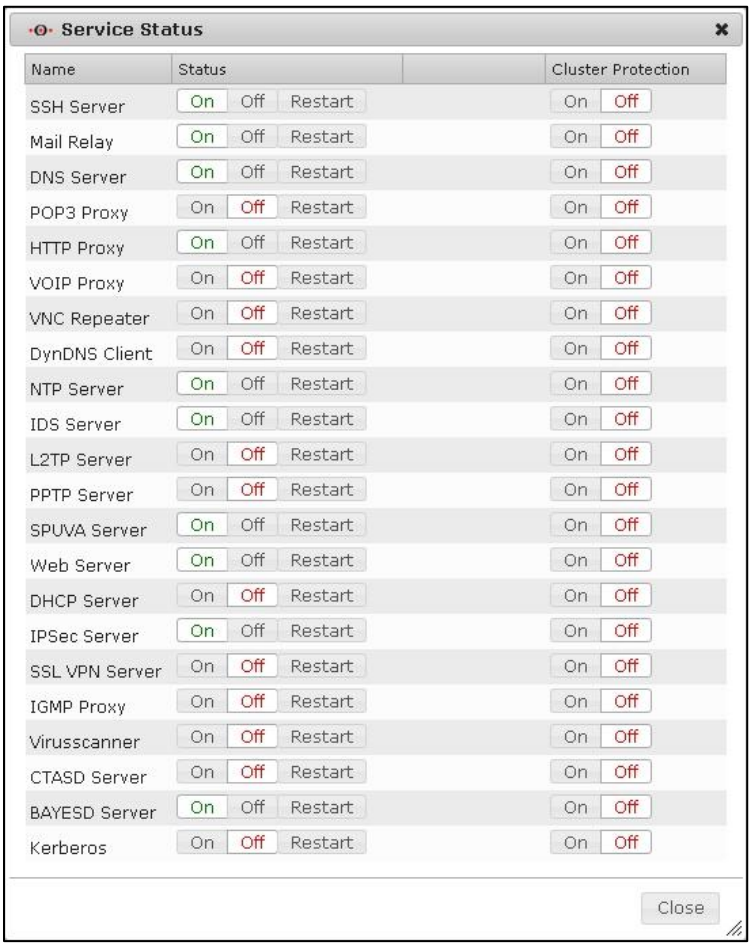


fig. 140 overview of the services, their states and their classification to critical services

10 Menu VPN

The Virtual Private Network (VPN) connects several computers or networks with the local network. This is realized by a tunneling connection through the internet. For the user the tunneling connection seems to be a normal network connection to the destination host. The VPN provides the user a virtual IP connection. The transmitted data packets are encrypted by the client and will be decrypted by the firewall and vice versa.

For transmitting the data, several protocols are used. The methods are varying in degree of safety and complexity.

fig. 141 dropdown menu VPN

name	description
IPSec Wizard	Assistant for creating IPSec VPN connections.
IPSec Globals	General settings for all IPSec connections.
IPSec	Editing and deleting of IPSec connections.
L2TP	Combination and enhancements of PPTP and L2F. Is supported by MS Windows.
PPTP	Point to Point Tunneling Protocol doesn't use a comprehensive encryption. Is supported by MS Windows.
SSL VPN	Uses the TLS/SSL encryption protocol.

10.1 IPSec Wizard

The assistant for creating IPSec VPN connections guides you step by step through the several configuration points.

You can choose between site-to-site or roadwarrior connection.

A site-to-site connection interlinks two networks. For example: The local network of a central office with the local network of a branch.

A roadwarrior connection binds one or more computers with the local network. For example: An outdoor staff connects with the laptop to the network of the central office.

10.1.1 Site-to Site

- Click in the ***VPN*** dropdown menu on the entry ***IPSec Wizard***.
  The dialog ***IPSec Wizard → Create an IPSec connection*** appears.
- Select the VPN type
  Site to Site Connection → Connects your local network with a remote network.
- Click ***Next***.

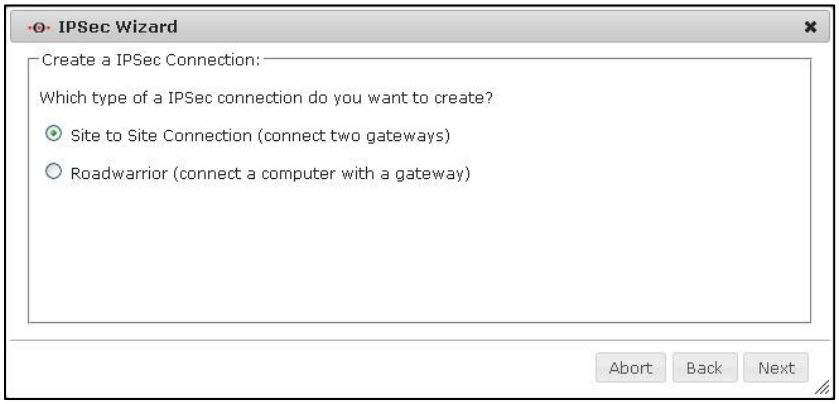

IPSec Wizard
Create a IPSec Connection:
Which type of a IPSec connection do you want to create?
Site to Site Connection (connect two gateways)
Roadwarrior (connect a computer with a gateway)
Abort
Back
Next

fig. 142 select kind of connection

- Enter a name for the VPN Connection in the field ***Connection name***.
- Enter the IP address or hostname of the remote network in the field ***Gateway***.
- If you want to use a DynDNS service, activate the checkbox ***Hostname resolved by DynDNS***.
- Click ***Next***.

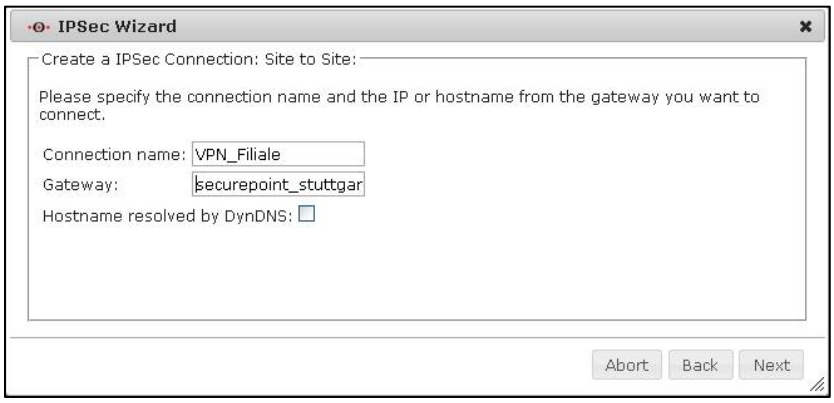

IPSec Wizard
Create a IPSec Connection: Site to Site:
Please specify the connection name and the IP or hostname from the gateway you want to connect.
Connection name: VPN_Filiale
Gateway: securepoint_stuttgar
Hostname resolved by DynDNS:
Abort
Back
Next

fig. 143 define name and gateway

You can decide between two authentication methods. Either use the preshared key (PSK) method or you use the authentication via certificate. The PSK is a password which is known by both connection partners.

Preshared Key Method

- Select the radio button ***Preshared Key***. Enter the preshared key (PSK).
- Decide which ***IKE*** (Internet Key Exchange) version you want to use and select the related radio button.
- Click ***Next***.

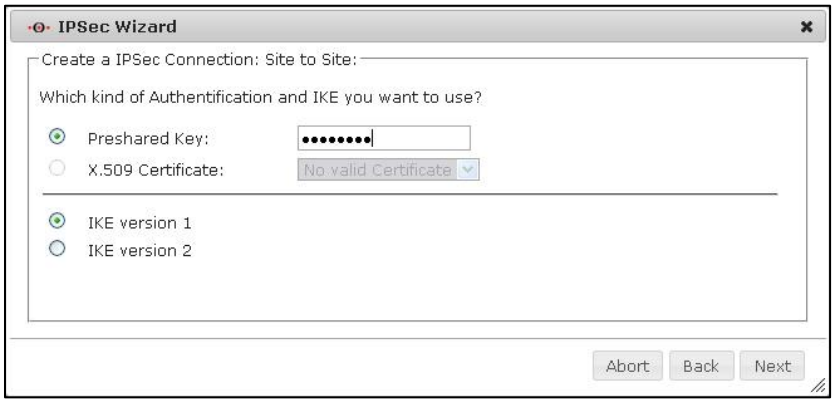


fig. 144 authentication via PSK and IKEv1

Certificate Method

- Mark the radio button ***x.509 Certificate*** and select a server certificate from the drop-down box.
- Decide which ***IKE*** (Internet Key Exchange) version you want to use and select the related radio button.
- Click ***Next***.

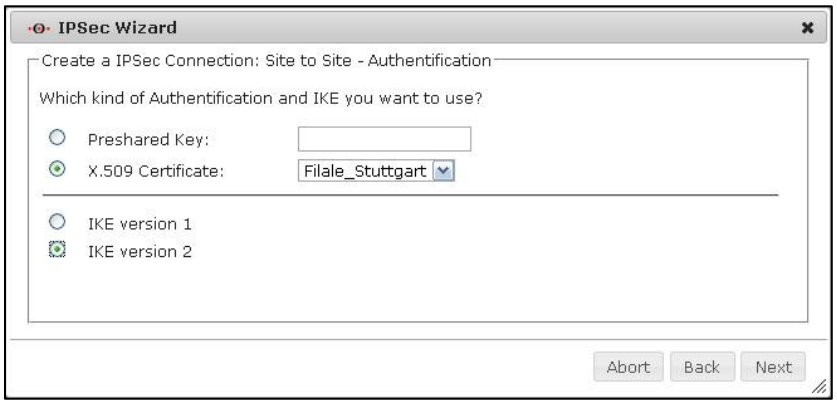


fig. 145 authentication via certificate and IKEv2

Now enter the networks which should be interlinked by the VPN connection.

- Under ***Local Network*** enter your local network.
  Select the according net mask at ***Local Mask***.
- Under ***Destination Network*** enter the remote network.
  Enter the according net mask at ***Destination Mask***.
- Activate the checkbox ***Automatically create firewall rules*** to create the firewall rules for the connection automatically.
- Click ***Finish*** to exit the assistant.

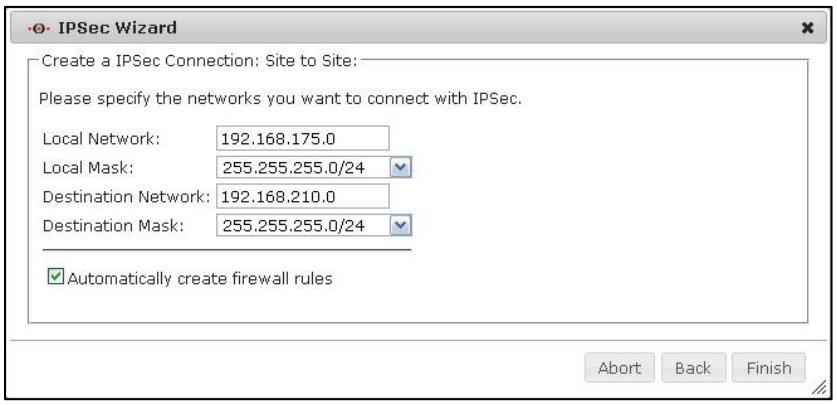


fig. 146 enter interlinked subnets

10.1.2 Site-to-End (Roadwarrior)

- Click in the ***VPN*** dropdown menu on the entry ***IPSec Wizard***.
  The dialog ***IPSec Wizard → Create an IPSec connection*** appears.
- Select the VPN type
  Roadwarrior → One or several computers can connect to the local network.
- Click ***Next***.

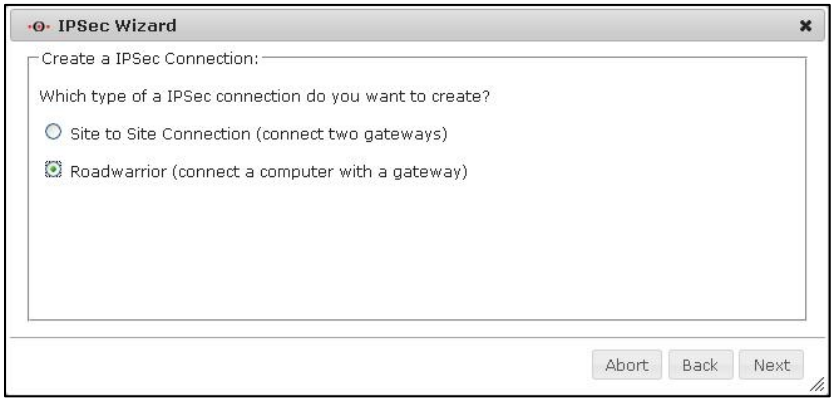

IPSec Wizard
Create a IPSec Connection:
Which type of a IPSec connection do you want to create?
Site to Site Connection (connect two gateways)
Roadwarrior (connect a computer with a gateway)
Abort
Back
Next

fig. 147 select kind of connection

- Enter a name for the VPN connection in the field ***Connection name***.
- Click ***Next***.

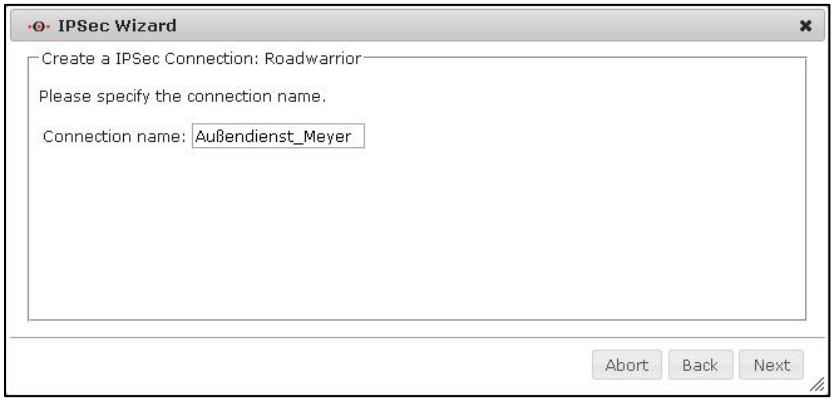


fig. 148 name of the connection

You can set up the IPSec (Internet Protocol Security) connection with or without L2TP (Layer2 Tunneling Protocol).
You need a separate client for native IPSec (without L2TP). The operating system Microsoft Windows 7 already includes a native IPSec client.

10.1.2.1 native IPSec

- Activate the radio button ***Native IPSec***.
- Click ***Next***.

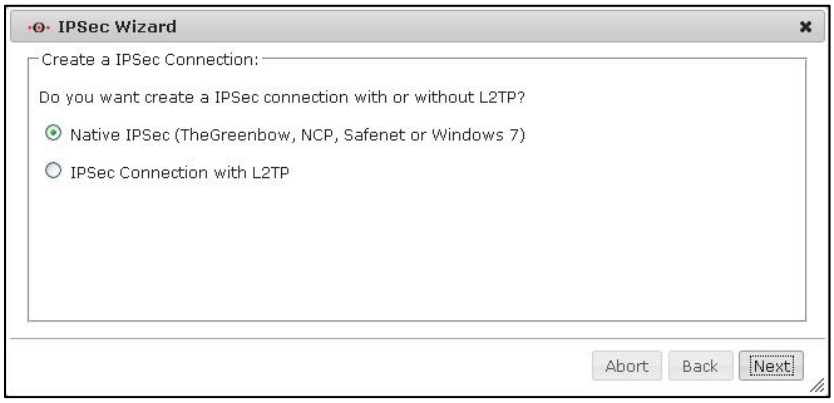

IPSec Wizard
Create a IPSec Connection:
Do you want create a IPSec connection with or without L2TP?
Native IPSec (TheGreenbow, NCP, Safenet or Windows 7)
IPSec Connection with L2TP
Abort
Back
Next

fig. 149 select native IPSec

Choose between the authentication methods preshared key and certificate. Furthermore select the IKE version you want to use.

- If you choose preshared key activate the radio button ***Preshared Key*** and enter the key into the field beneath.
- If you choose certificate activate the radio button ***x.509 Certificate*** and select a server certificate from the dropdown box.
- Choose between ***IKEv1*** and ***IKEv2*** and activate the relative radio button.
- Click ***Next***.

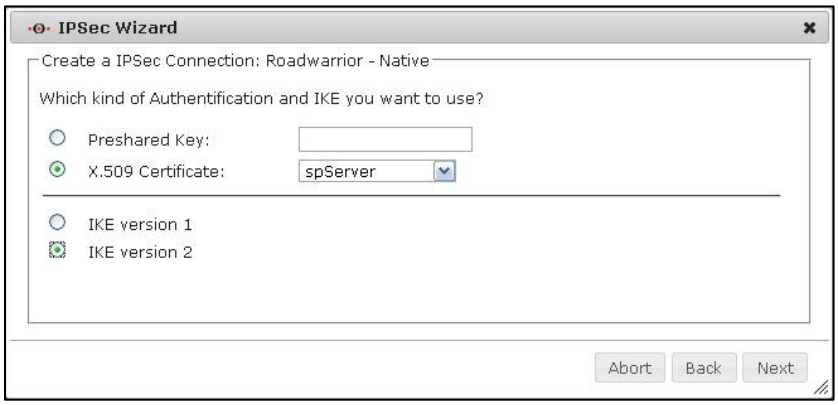


fig. 150 authentication via certificate and IKEv2

10.1.2.1.1 IKEv1

If you selected IKEv1 you have to specify the local network and an IP address for the road-warrior.

- Enter the network the roadwarrior connects to into the field ***Local Network***.
- Select the related subnet mask from the dropdown box ***Local Mask***.
- Enter an IP address from the subnet into the field ***Roadwarrior IP address***. This IP will be assigned to the roadwarrior when it connects to the local network.
- If you want to set up the firewall rules automatically, activate the checkbox ***Automatically create firewall rules***.
- Click ***Finish*** for exiting the wizard.

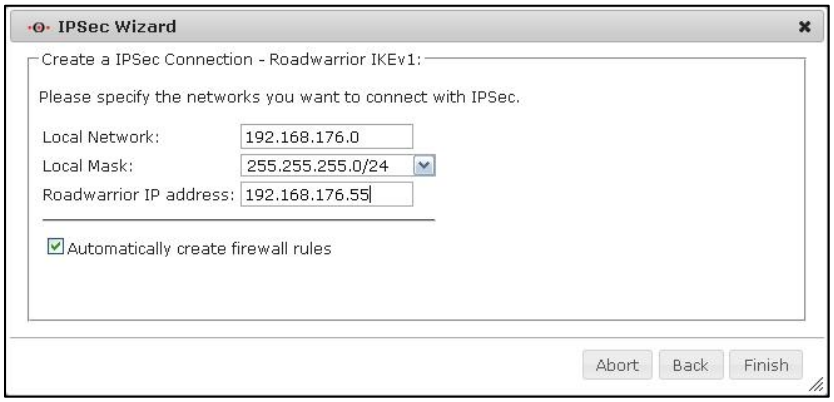


fig. 151 settings IKEv1

10.1.2.1.2 IKEv2

If you selected IKEv2 you have to enter an individual IP address for the roadwarrior or a address pool.

- Enter the network the roadwarrior connects to into the field ***Local Network***.
- Select the related subnet mask from the dropdown box ***Local Mask***.
- Activate the radio button ***Single Roadwarrior IP address*** if you want to give access to just one roadwarrior and enter the IP address into the field beneath.
- If you want to give access to a couple of roadwarriors, activate the radio button ***Address Pool*** and enter the IP address of the address pool and the related subnet mask. An IP address out of this pool will be assigned to the roadwarrior if it connects to the network.
- If you want to set up the firewall rules automatically, activate the checkbox ***Automatically create firewall rules***.
- Click ***Finish*** for exiting the wizard.

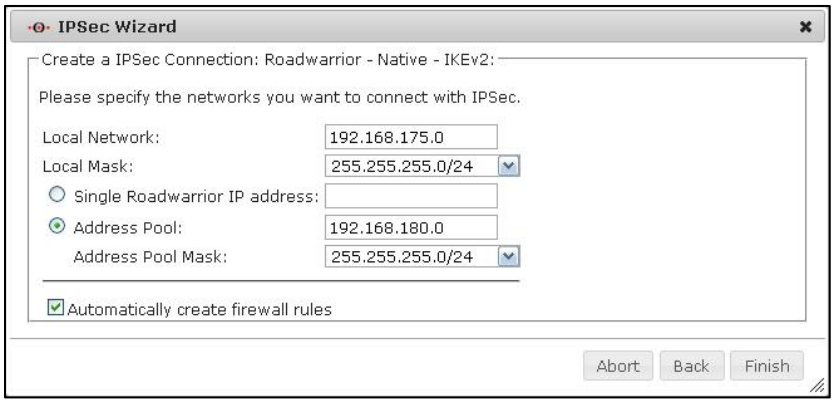


fig. 152 settings IKEv2

10.1.2.2 L2TP

L2TP combines the PPT protocol and the L2F protocol. Because L2TP has no authentication, integrity and encryption mechanism it is combined with IPSec.

- Activate the radio button ***IPSec Connection with L2TP***.
- Click ***Next***.

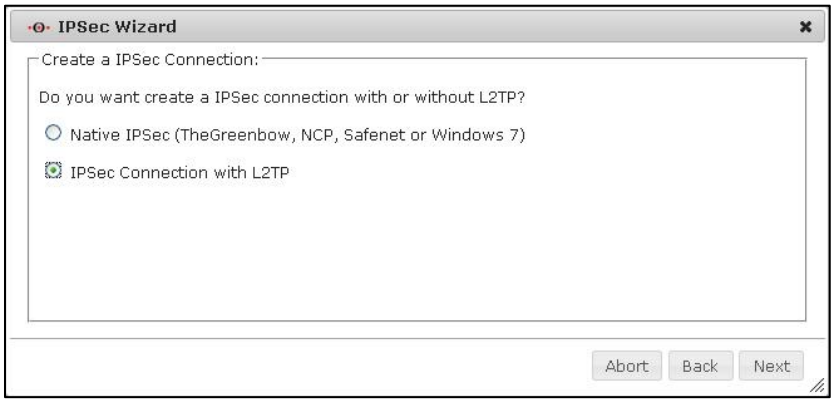

IPSec Wizard
Create a IPSec Connection:
Do you want create a IPSec connection with or without L2TP?
Native IPSec (TheGreenbow, NCP, Safenet or Windows 7)
IPSec Connection with L2TP
Abort
Back
Next

fig. 153 select L2TP

Select the authentication method.

- If you want to use a preshared key, activate the radio button ***Preshared Key*** and enter the key into the field beneath.
- If you want to use a certificate, activate the radio button ***x.509 Certificate*** and select a server certificate from the dropdown box.
- Click ***Next***.

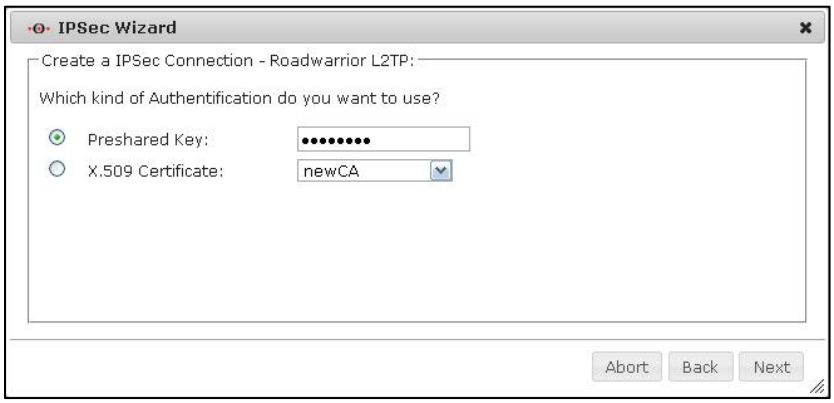


fig. 154 select the authentication method

Enter the address pool for the roadwarrior and the IP address of the DNS server.

- Enter the local IP address into the field ***Local L2TP IP address***.
- Enter the IP address range into the fields ***L2TP address pool***.
- Enter the IP addresses of the first and the second DNS servers into the fields ***Primary*** and ***Secondary nameserver***.
- Click ***Next***.

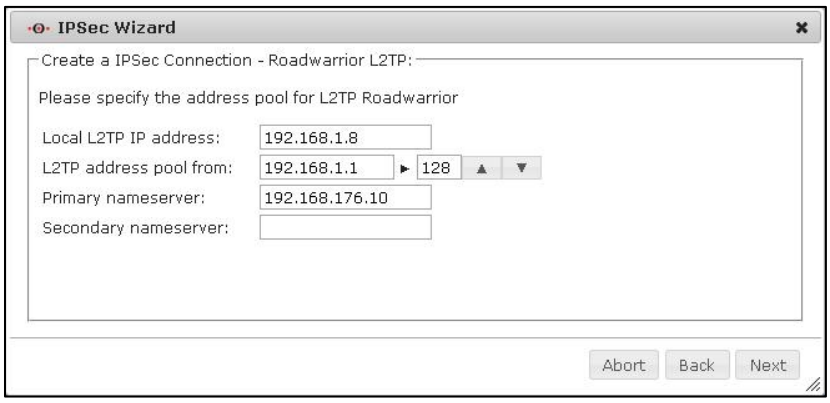


fig. 155 define address pool and DNS server

The last step offers the creation of L2TP users. If you don't want to use this option click ***Finish*** and leave the wizard.

- Enter the user name of the new user into the field ***Login name***.
- Enter the first name and the surname into the field ***Fullname***.
- Assign a password to the user in the field ***Password*** and confirm it in the field ***Confirm Password***.
- Click ***Finish*** to save the IPSec connection and the user.

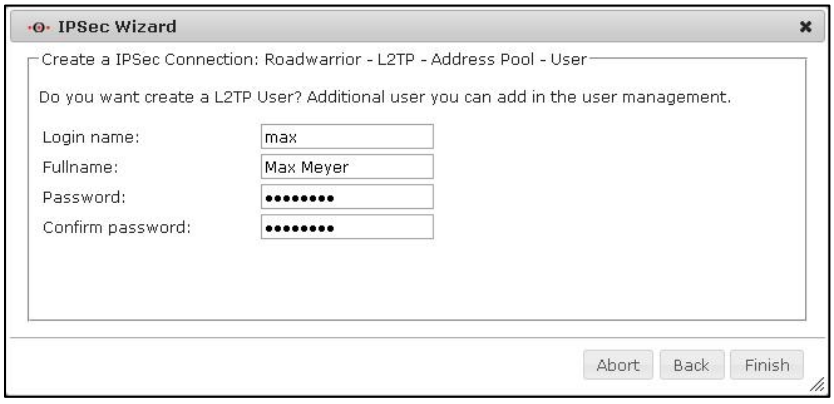


fig. 156 create L2TP user

10.2 IPSec Globals

Adjust general settings for all IPSec VPN connections.

10.2.1 General Settings

On this tab you can activate the option ***NAT Traversal***. This function prevents the manipulation of IPSec packets by address translation. This could occur if the mobile user uses NAT devices himself.

fig. 157 option NAT Traversal

10.2.2 IKE V2

The Internet Key Exchange (IKE) protocol is used for managing and exchange of IPSec keys. It arranges the connection establishment and the authentication of the communication partner. Furthermore it is responsible for the negotiation of the encryption parameters and the generation of the keys. The complexity of the protocol complicates the configuration of an IPSec connection, especially if you use different end devices.
The new version of the IKE protocol (IKEv2) defangs this complexity. It allows a faster connection establishment and a more stable connection. By now this version is supported by several programs. It is implemented in Microsoft Windows 7 too.

In this dialog the IP addresses of the Domain Name servers and the Windows Internet Name Service servers are specified. This will be forwarded to the remote stations.

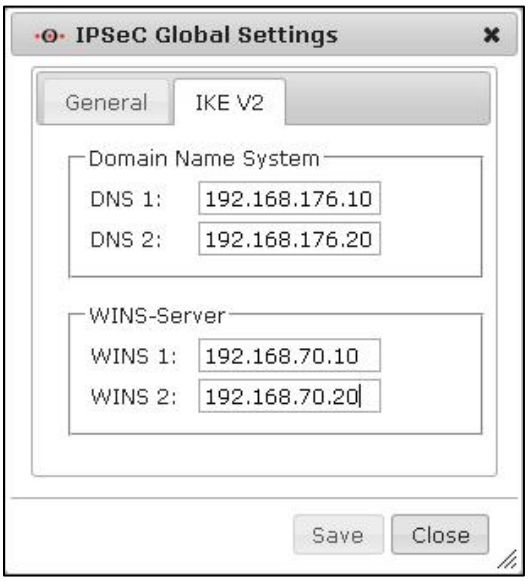


fig. 158 IKEv2 settings

10.3 IPSec

This point displays an overview of all native IPSec and L2TP connections.
Here you can adjust the settings of the connections, delete, load, initiate and stop the connections. Furthermore the status of the connection is shown.

10.3.1 Edit Connection

An IPSec connection is divided into two phases.
The first phase negotiates the encryption method and the authentication. The Internet Key Exchange (IKE) protocol defines, in which way security parameters will be agreed and shared keys will be exchanged.
The second phase creates new key material irrespective of the previous keys. So no one can gather the new key from the previous key.

10.3.1.1 Phase 1

In these settings the basic connection parameters are stored.

name	description
tab General	
Local gateway ID	ID of the appliance. If you use the interface ppp0/eth0 the firewall ID is the IP-address of the interface. You can insert the hostname as well (also the DynDNS name).
Remote host/gateway	remote VPN gateway or host (Name or IP-address)
Remote host/gateway ID	remote VPN gateway or host (Name or IP-address) Enter the certificate of the remote host, if the connection uses certificates for authentication.
Authentication	Shows which authentication method is used. Key (PSK) or certificate.
Local key/ Local Certificate	Depending on the authentication method, enter the local key (PSK) or the name of the certificate.
Start automatically	Activate only for site-to-site connections.
Dead peer detection	This functions recognizes, if the connection aborted unexpectedly. If an abort is recognized, the tunnel will be shut down completely to guarantee a new link connection.
DynDNS name	Mark this checkbox, if the remote host uses a DynDNS service.

tab IKE	
Encryption	Encryption method
Authentication	Authentication method
Strict	If this box is activated, the remote station must use the same settings for key and hash mode (regards phase 1 and phase 2).
DH Group	Key length of the Diffie Hellmann key.
IKE life	Duration of an IKE connection. The period can vary between 1 and 8 hours. Afterwards a new link connection is necessary for security reasons. This starts automatically.
Keyingtries	How many trials to initiate the connection (time lag 20 seconds). ***unlimited*** → unlimited trials ***three times*** → Three trials to initiate the connection.

10.3.1.2 Phase 2

name	description
tab General	
Encryption	Encryption method
Authentication	Authentication method
PFS	Perfect Forward Secrecy The new key material must be created irrespective of the previous keys. So no one can gather the new key from the previous key.
Key life	Duration of an IKE connection. The period can vary between 1 and 8 hours. Afterwards a new link connection is necessary for security reasons. This starts automatically.
tab Native IPSec	
Local Net / Mask	Local net which is connected with the remote net via VPN.
Remote Net / Mask	Remote net which is connected with the local net via VPN.
tab L2TP	
L2TP Subnet	local subnet for L2TP connections Only useable with L2TP connections with MS Windows Vista or MacOSX, if the client is positioned behind a router.
tab Address Pool	
Local Net / Mask	Local net which is connected with the remote net via VPN.
Address Pool / Mask	From this address pool an IP address will be assigned to the roadwarrior when connecting to the local net.

10.4 L2TP

In this section you can set the general setting for L2TP VPN connections.

- Click in the ***VPN*** dropdown menu ***L2TP***.
  The dialog ***VPN L2TP*** appears.
- In the tab ***General*** you have to adjust basic settings.
- Enter the IP which should be used by the L2TP interface in the field ***Local L2TP IP***.
  An explicit L2TP interface doesn't exist. The entered IP address will be bound as a virtual address to the external interface.
- Under ***L2TP Address Pool*** adjust a L2TP address pool.
  This must be set in the same subnet as the L2TP IP address.
  The left field contains the start address and the right field the end address of the address pool.
- For the ***Maximum Transmission Unit (MTU)*** the default value ***1300*** should be retained.
- Under ***Authentication*** select the authentication mode.
  You can select from local authentication against the database of the appliance, authentication via a Radius server or via an Active Directory.
- Store your settings with ***Save***.

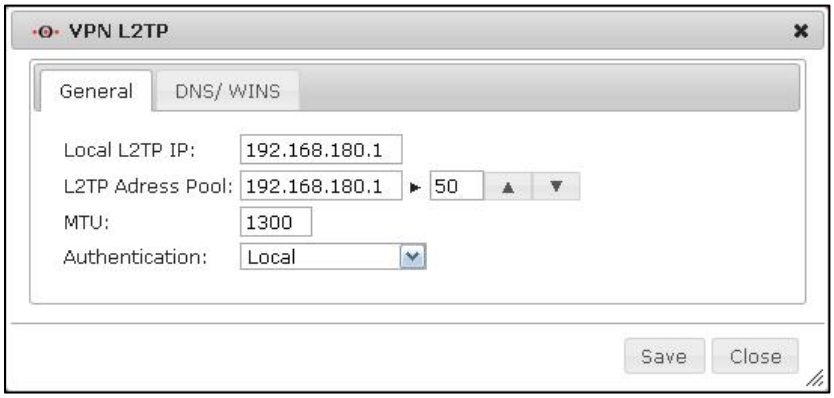


fig. 159 adjust IP address, address pool and authentication method

In the tab ***NS/WINS*** enter the IP addresses of the name server and of the WINS-server (Windows Internet Name Service), if you use one. This will be forwarded to the L2TP network.

- Switch to the tab ***NS/WINS***.
- Enter the IP-address of the primary and secondary ***Nameserver***.
- Enter the IP-address of the primary and secondary ***WINS-server*** (if you use one).
- Store your settings with ***Save***.

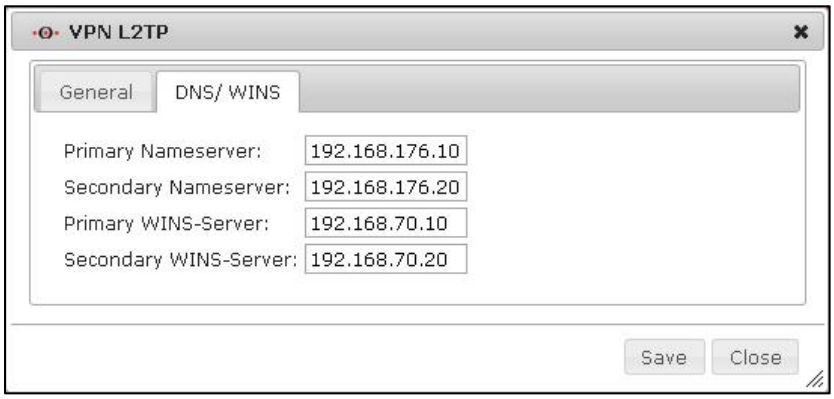


fig. 160 define IP adresses of DNS and WINS servers

10.5 PPTP

The basic settings of VPN via PPTP are nearly identical to the settings of L2TP.

The basic settings of the PPTP interface and address pool are set on the tab ***General***. On the other tab enter the IP addresses of the name server and the WINS servers.

- Click in the ***VPN*** dropdown menu ***PPTP***.
  The dialog ***VPN PPTP*** appears.
- In the tab ***General*** you have to adjust basic settings.
- Enter the IP which should be used by the PPTP interface in the field ***Local PPTP IP***.
  An explicit PPTP interface doesn't exist. The entered IP address will be bound as a virtual address to the external interface.
- Under ***PPTP Address Pool*** adjust a PPTP address pool.
  This must be set in the same subnet as the PPTP IP address.
  The left field contains the start address and the right field the end address of the address pool.
- For the ***Maximum Transmission Unit (MTU)*** the default value ***1300*** should be retained.
- You can select, if you want to use an authentication against a Radius server.
  Enable or disable the ***Radius Server Authentication*** by selecting ***On*** or ***Off***.
- Store your settings with ***Save***.

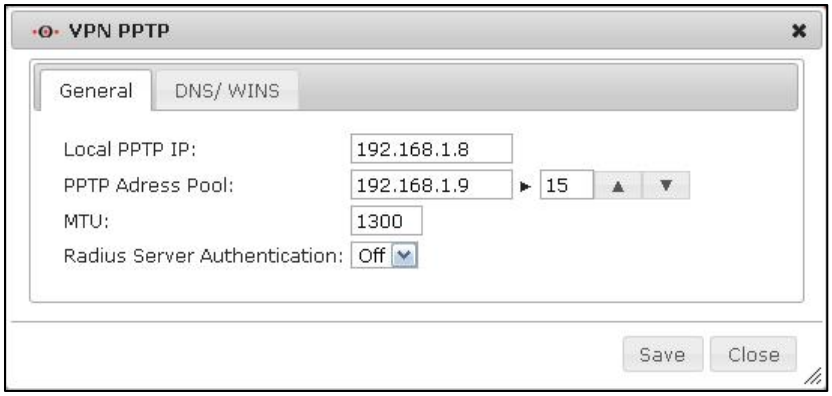


fig. 161 adjust IP address, address pool and authentication

In the tab ***NS/WINS*** enter the IP addresses of the name server and of the WINS-server (Windows Internet Name Service), if you use one. This will be forwarded to the PPTP network.

- Switch to the tab ***NS/WINS***.
- Enter the IP-address of the primary and secondary ***Nameserver***.
- Enter the IP-address of the primary and secondary ***WINS-server*** (if you use one).
- Store your settings with ***Save***.

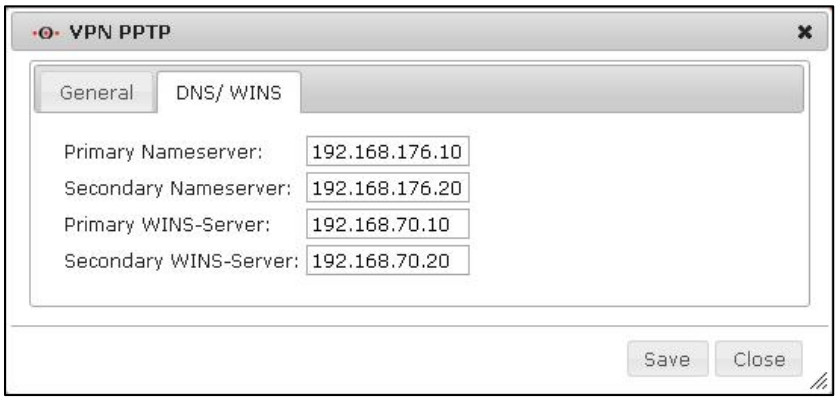


fig. 162 define IP addresses of DNS and WINS servers

10.6 SSL VPN

In this section you can set the general setting for SSL encrypted VPN connections.

- Enter the desired IP which should be used by the virtual interface in the field ***SSL VPN IP***.
  This VPN connection will be established over a separate virtual interface. The address pool depends on the IP address of the ***tun interface***. If you change the IP address in this section, it will also change in the section ***network configuration***.
- Enter the port of the SSL VPN in the field ***SSL VPN Port***. The default port 1194 is already set.
- The SSL VPN uses the protocol udp. You can change the protocol to tcp. This is not recommended because a big overhead is produced.
- Select a server certificate from the dropdown box ***SSL VPN Certificate***. This certificate has to be created with the option ***Server Authentication***. This authenticates the appliance as a SSL VPN server.
- Store your settings with ***Save***.

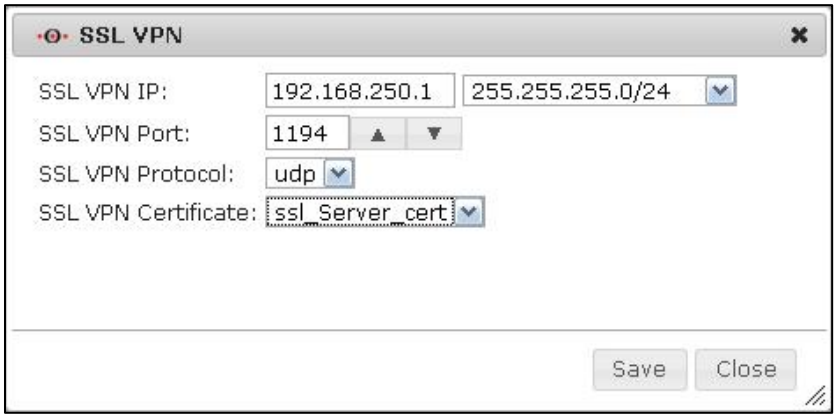


fig. 163 adjust IP address, address pool and server certificate

11 Menu Authentication

The user- and certificate administration is located in the section ***Authentication***. Furthermore you can adjust the settings of external authentication methods here.

fig. 164 dropdown menu authentication

name	description
Users	User administration for creating new users and editing existing users. Furthermore assigning group membership, password, etc.
External Authentication	Settings for external authentication via Radius- or LDAP-server.
Certificates	Certificate administration for creating new certificates. Also export and import methods are available.

11.1 Users

The dropdown menu item ***Users*** displays a list with all existing users and their permissions in binary format.

The users are listed in order of their creation.

Existing users can be edited by clicking the ***wrench symbol*** or deleted by using the ***trash-can symbol***.

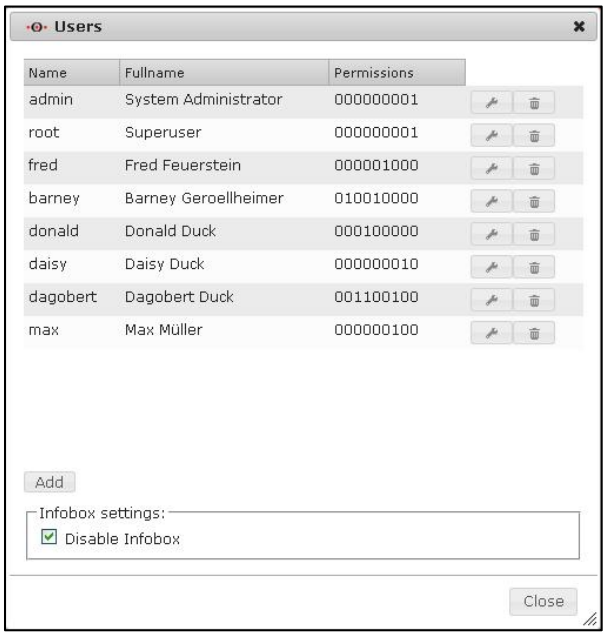


fig. 165 list of existing users

When the mouse cursor moves over an user, an ***infobox*** appears, which shows the user permissions and assigned VPN IP addresses of the related user.

You can activate this function by unchecking the checkbox ***Disable Infobox***.

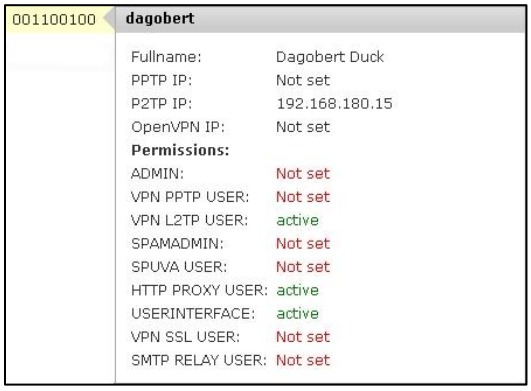


fig. 166 user properties

11.1.1 Add User

Tab General

- For adding a new user, open the window ***Users*** and click on the button ***Add***. The dialog ***Add User*** appears.
- In the tab ***General*** you have to adjust basic settings.
- Under ***Login*** enter the name which the user uses for logging in.
- Under ***Name*** enter the real name of the user.
- Insert a password in the field ***Password*** and retype it in the field ***Confirm password***.
- Activate the designated group memberships by marking the according checkboxes. It is allowed to check more than one box.

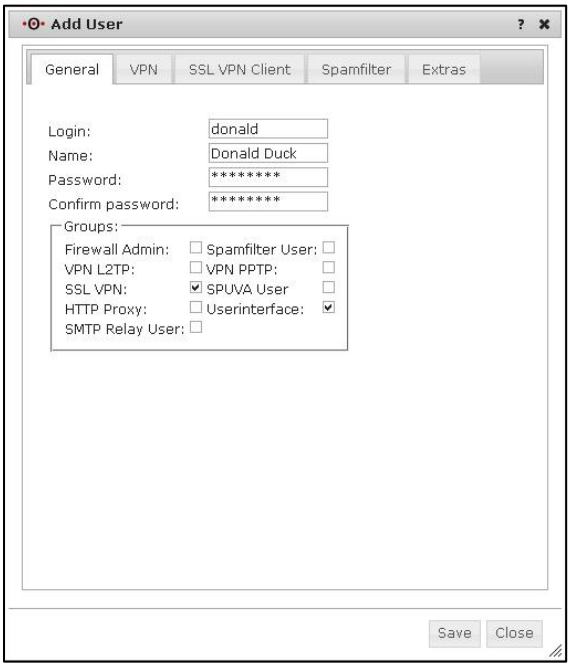


fig. 167 general setting for a new user

name	binary	description
Firewall Admin	000000001	Administrator of the firewall
VPN PPTP	000000010	PPTP VPN connection user
VPN L2TP	000000100	L2TP VPN connection user
Spam Filter User	000001000	Administrator of the spam filter
SPUVA User	000010000	User authenticates via Securepoint User Verification Agent
HTTP Proxy	000100000	HTTP proxy user
User Interface	001000000	User of the firewall user interface
SSL VPN	010000000	SSL VPN connection user
SMTP Relay User	100000000	User of the SMTP mail relay

11.1.2 Add User

Tab VPN

If the new user is L2TP or PPTP VPN user, you can assign an IP address to the user for the VPN connection. The IP address must be contined in the address pool.

If the new user utilizes SSL VPN, you have to set a SSL-VPN-IP-address on the tab VPN.

- Switch to the tab ***VPN***.
- Assign an IP address which is used by the user in the L2TP or PPTP VPN tunnel. This statement is **optional**.
- Is the user SSL VPN user, a tunnel IP address must be set.
  This IP address must be an IP address of the subnet of the tun0 interface (default 192.168.250.xxx).
  The last part of the IP address must fulfill the following condition:
  a multiple of 4 minus 2.
  Formula: x = (4 * y) – 2
  Possible values for the last part of the IP address:
  {2; 6; 10; 14; …; 246; 250; 254}

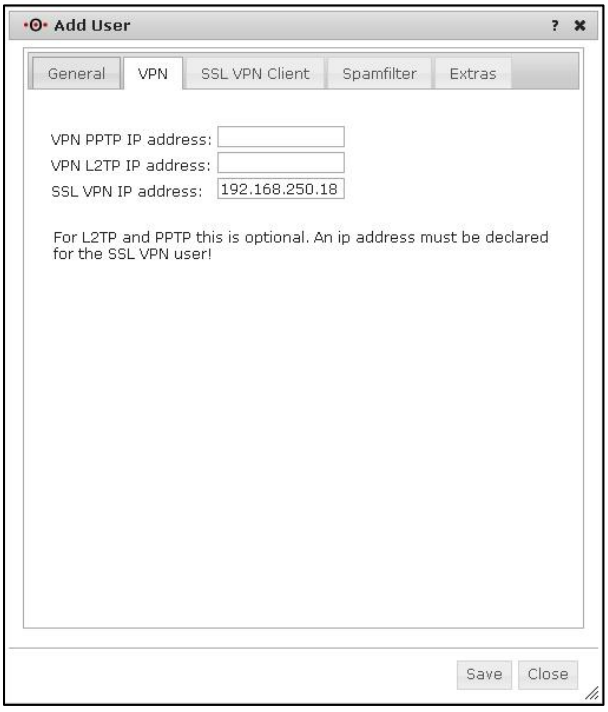


fig. 168 assign a VPN IP address

11.1.3 Add User

Tab VPN Client

This tab will be activated if the user is member of the group SSL VPN. In this tab you make settings to build a preconfigured SSL VPN client package for the user. The package includes a configuration file, a certificate and the portable OpenVPN client. The user can download the package in the user interface. Therefore the user needs the membership in the group User Interface.

If the user isn't member of this group you can preconfigure the SSL VPN package anyway. You just have to hand the package to the SSL VPN user (see chapter 14.3).

- To enable the preconfiguration, activate the checkbox ***Enable VPN Client***.
- Select a user certificate from the dropdown box ***Certificate***. If no certificate is shown, you have to create one first.
- Select an IP address or a hostname in the field ***SSL VPN Gateway*** which is used by the SSL VPN service.
  Either select a ***dynamic DNS entry*** from the ***dropdown box*** or enter an ***IP address*** or ***host name*** into the field ***Alternative***.
- The option ***Redirect default gateway to remote site*** reroutes the whole internet traffic of the VPN user over the appliance.
- Click the button ***Download Client*** to download the client package as a zip archive.

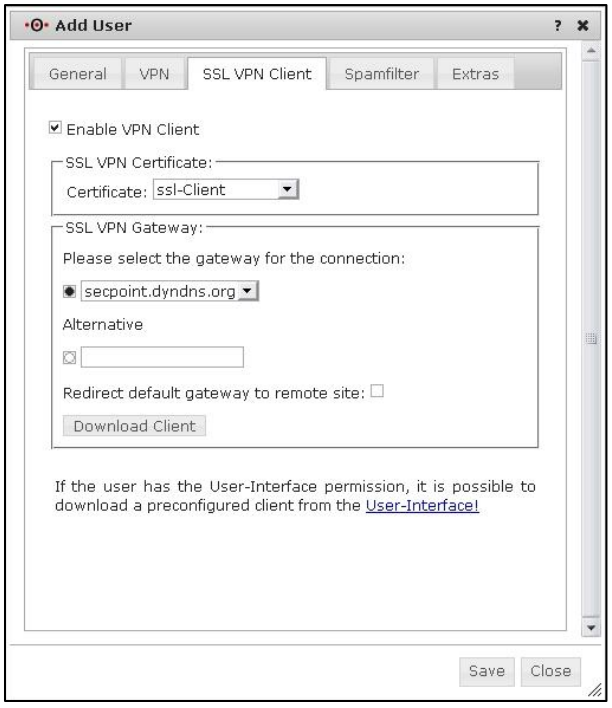


fig. 169 setting for preconfigured SSL VPN client

11.1.4 Add User

Tab Spam Filter

Is the user member of the group ***Spam Filter User***, you can restrict the permissions to several e-mails-addresses or domains. You can add three entries. If you don't enter any restriction, the user can access all e-mails

Restriction to several e-mail-addresses must be set for the whole e-mail-address.
For example: *john.smith@example.org*
Restriction to domains must be set with a leading "at" symbol.
For example: *@example.org*

- Switch to the tab ***Spam Filter***.
- Restrict the display of the spam filter interface to several e-mail-addresses or domains. These settings are only relevant for users, which are members of the group ***Spam Filter User***.
- Activate the checkbox ***Show blocked attachments in Spam Filter*** to disable the possibility to display blocked attachments.

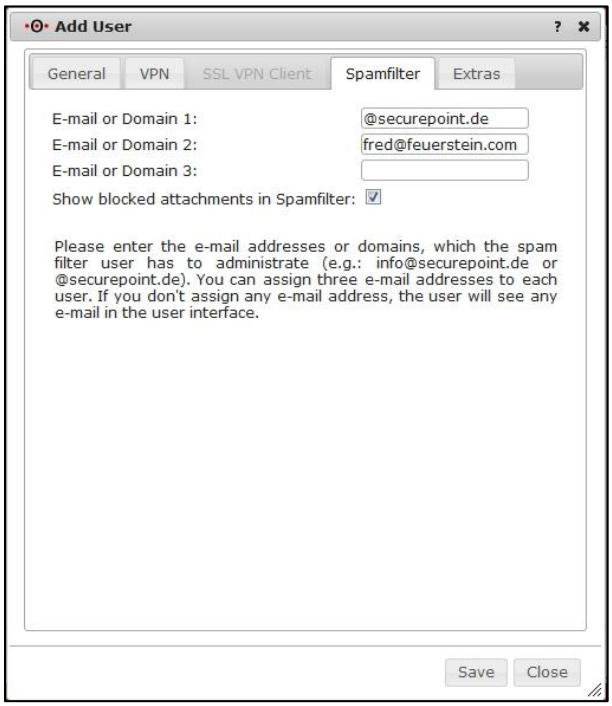

Add User
General
VPN
SSL VPN Client
Spamfilter
Extras
E-mail or Domain 1:
@securepoint.de
E-mail or Domain 2:
fred@feuerstein.com
E-mail or Domain 3:
Show blocked attachments in Spamfilter:
Please enter the e-mail addresses or domains, which the spam filter user has to administrate (e.g.: info@securepoint.de or @securepoint.de). You can assign three e-mail addresses to each user. If you don't assign any e-mail address, the user will see any e-mail in the user interface.
Save
Close

fig. 170 restrict the display of the spam filter

11.1.5 Add User

Tab Extras

On this tab you can adjust the settings for the password.
You decide if the user may change the password himself, if the password must contain numbers, special characters, lower- and uppercase letters and the minimal password length.
The password can only be changed in the user interface.

- Switch to the tab ***Extras***.
- If the user is allowed to change the password, check the checkbox ***User can change password***.
- Select the ***Minimum password length***.
- Decide which characters the password must contain:
  numbers
  special characters
  lower- and uppercase letters
- Store your settings with ***Save***.

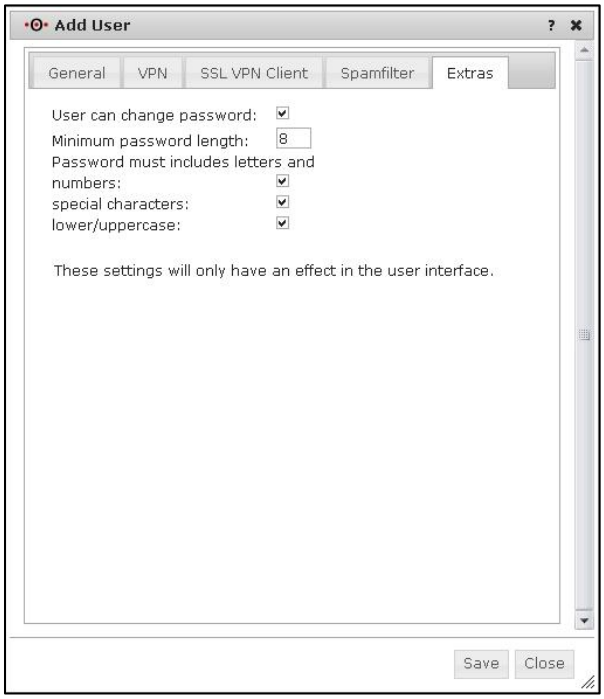


fig. 171 password properties

11.1.6 Add User

Tab WoL

The abbreviation WoL stands for Wake on LAN. You can start start turned off computers over LAN. The mainboard and the network adapter must support ACPI to use this function. The option must set in the BIOS and in the network adapter settings.
If this option is set for a user, the user can start listed computer over the user-interface. The membership UserInterface is required.

- Switch to the tab ***WoL***.
- Activate the checkbox ***Enable WoL***.
- Enter the ***name*** of the computer in to the ***first field*** below the list.
- Select the ***interface*** from the ***dropdownbox*** the computer is connected to.
- Enter the ***MAC address*** of the network adapter of the remote computer into the ***third field***.
  The address must be given in double characters separated by a ***colon***.
- Click ***Add***.

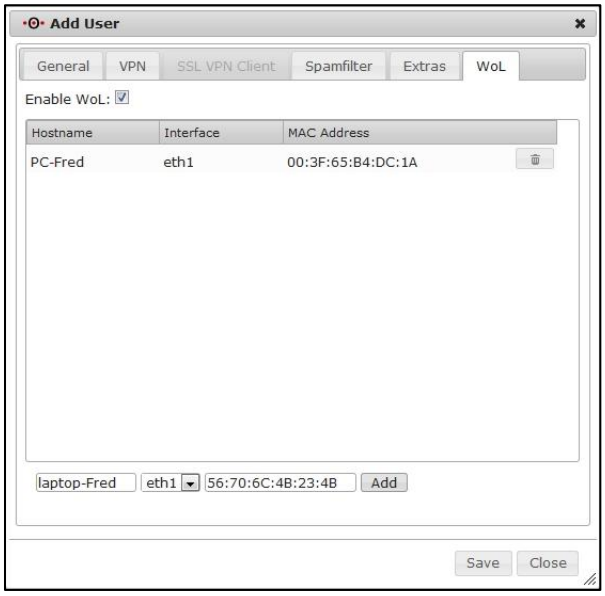


fig. 172 computer which can be started by the user

11.2 External Authentication

For user authentication you can not only use the local database but also external authentication databases. The appliance offers checking against a Radius- or LDAP server.
For the HTTP proxy you can also select authentication with the Kerberos service.

11.2.1 Radius

Enter the access data for the Radius server on the tab Radius.

- Open the dialog ***External Authentication***.
  On the tab ***Radius*** insert the data of the Radius server.
- Insert the hostname or the IP address of the server in the field ***IP address or host name***.
- Under ***Mutual secret key*** insert the password and retype it in the field ***Confirm mutual secret key***.
- Store your settings with ***Save***.

fig. 173 access data for the Radius server

11.2.2 LDAP Server

For using a LDAP server follow the approach below.

- Open the dialog ***External Authentication***.
  On the tab ***LDAP*** insert the data of the LDAP servers.
- Insert the host name or the IP address of the server in the field ***IP address or host name***.
- Enter the server domain into the field ***Server Domain***.
- Under ***User name*** insert your user name of the server.
- Under ***User password*** insert your password and retype it in the field ***Confirm user password***.
- Store your settings with ***Save***.

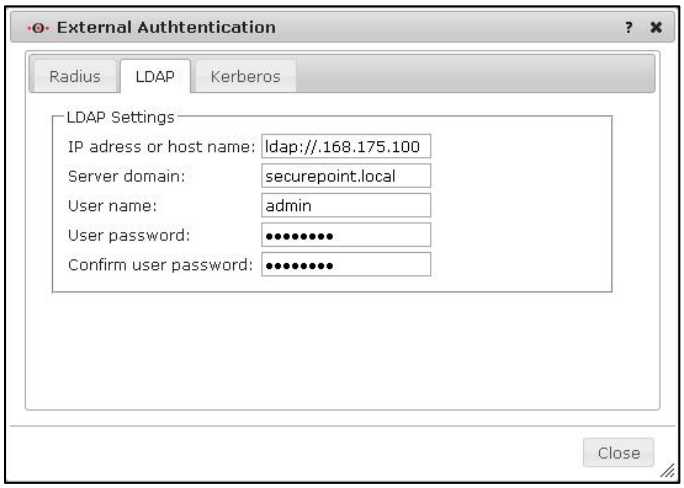


fig. 174 acces data for the LDAP server

If you use the LDAP authentication in combination with the services HTTP proxy or L2TP, you have to create new groups in the Active Directory (AD), and users, which may access the local net have to be members in these new groups.

HTTP-Proxy → group in AD SecurepointHttp
L2TP → group in AD SecurepointL2tp

11.2.3 Kerberos

The Kerberos authentication service authorizes the access of the HTTP proxy. It not only authenticates the client to the server but also the server to the client.

- Switch to the tab ***Kerberos***.
- Enter the LDAP group name of the group you want to give access into the field ***Workgroup***.
- Enter the domain name of the realm used into the field ***Domain***.
- Under ***AD Server*** enter the IP address of the computer which hosts the Kerberos service.
- Enter the IP address of the used DNS server into the field ***Primary Nameserver***.
- Enter the administrator of the Kerberos server into the field ***User***
- Enter the password of the Kerberos administrator into the field ***Password*** and retype it in the field ***Confirm Password***.

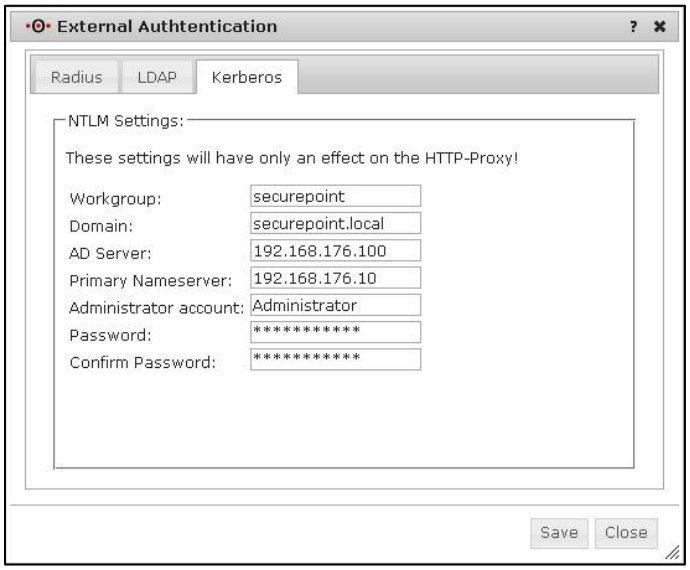


fig. 175 access data for the Kerberos server

11.3 Certificates

The appliance uses certificates to authenticate users which connect via VPN. The certificate proves the users identity and contains a digital signature and statements about the owner. Certificates are signed by a Certification Authority (CA) to guarantee the genuineness of the certificate. Normally the CA is a third independent and trustable instance. You can create a CA yourself to sign the certificates you have generated. The signed certificates will be distributed to the users which connect to the local net via VPN. The signature assures that the certificates are created by the firewall and not by anybody else.
For a complete authentication, not only the remote station needs a certificate but also the firewall itself. You have to create one certificate for the firewall and one certificate for each external user.

You can import external certificates given in PEM format. You may also export local certificates in PEM format or as PKCS #12.

The tab CA shows all existing Certification Authorities.
The tab Certs shows all available certificates.
The tab Revoked shows all invalid CAs and certificates.

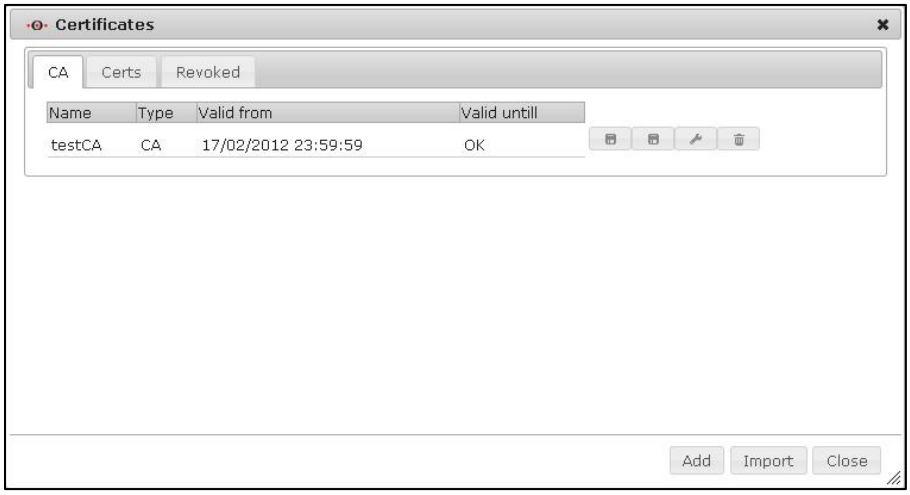


fig. 176 list of available CAs

11.3.1 Create CA

At first you have to create a CA to sign created certificates.

- Click in the tab ***CA*** onto ***Add***.
  The dialog ***Add Certificate*** appears.
- The fields ***Valid from*** and ***Valid until*** define the duration of validity of the CA. You can enter the date directly into the first field. Or click into the field and a calendar appears where you can select the date. The following three fields are reserved for the time (hour, minutes, and seconds).
  When the validation of the CA expires, all certificates which are signed with this CA will become invalid too.
- Enter a name for the CA into the field ***Name***.
- Select your country identifier from the field ***Country***.
- Enter your region into the field ***State***.
- Enter the name of your city into the field ***City***.
- Enter the name of your company into the field ***Organisation***.
- Enter the department into the field ***Unit***.
- Enter you e-mail address into the field ***E-mail***.
- Click ***Save*** to create the CA.

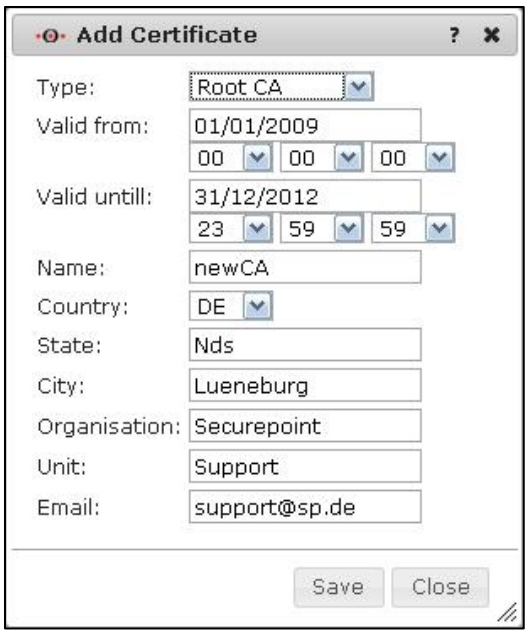


fig. 177 create CA

11.3.2 Create Certificates

- Click in the tab ***Cert*** onto ***Add***.
  The dialog ***Add Certificate*** appears.
- The fields ***Valid from*** and ***Valid until*** define the duration of validity of the certificate. You can enter the date directly into the first field. Or click into the field and a calendar appears where you can select the date. The following three fields are reserved for the time (hour, minutes, and seconds).
- Enter a name for the certificate into the field ***Name***.
- Select your country identifier from the field ***Country***.
- Enter your region into the field ***State***.
- Enter the name of your city into the field ***City***.
- Enter the name of your company into the field ***Organisation***.
- Enter the department into the field ***Unit***.
- Enter you e-mail address into the field ***E-mail***.
- Select the ***CA*** to sign the certificate with.
- Select an ***Alias*** optionally (You will need it under the operating system MacOS).
- Activate the checkbox ***Server Authentication*** if you want to create a server certificate.
- Click ***Save*** to create the certificate.

fig. 178 create client certificate

fig. 179 create server certificate

11.3.3 Import CA and Certificate

You can import CA and certificates, if they are available in PEM file format.

- Switch to the corresponding tab (***CA*** or ***Certs***).
- Click ***Import*** and in the appearing dialog click ***Browse***.
- Select the file you want to import from your file system.
- After that click ***Import***.

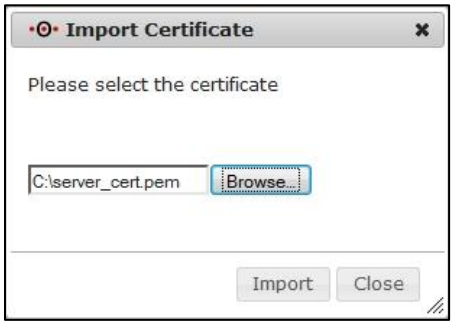


fig. 180 import dialog

11.3.4 Export CA and Certificate

You also can export CAs and certificates. You may select between PEM file format and the encrypted format PKCS #12. You ought to consider that the appliance only imports the PEM file format.

- Switch to the corresponding tab (***CA*** or ***Certs***).
- At the end of every row you find the following icons:

  The left icon exports the certificate or the CA as PEM file format.
  The right icon exports the certificate or the CA as PKCS #12 (*.p12) format.
- Click on the favored icon and save the certificate or CA on your local file system.

11.3.5 Download SSL-VPN Client

You can also download the preconfigured SSL VPN client from the tab ***Certs***. An Icon in the row of every certificate offers the download of the zip archive. The archive includes the portable OpenVPN client, a preconfigured configuration, the CA and the relating cert.

- Switch to the tab ***Certs***.
- Select the desired certificate and click on the following icon.

- The dialog ***OpenVPN–Client*** appears. It asks for settings to configure the OpenVPN configuration.
- Select a ***DynDNS Entry*** from the dropdown box.
- Or enter an ***IP address*** into the field ***Alternative***.
- The option ***Redirect default gateway to remote site*** reroutes the whole internet traffic of the VPN user over the appliance.
- Click ***Save*** to start the download.

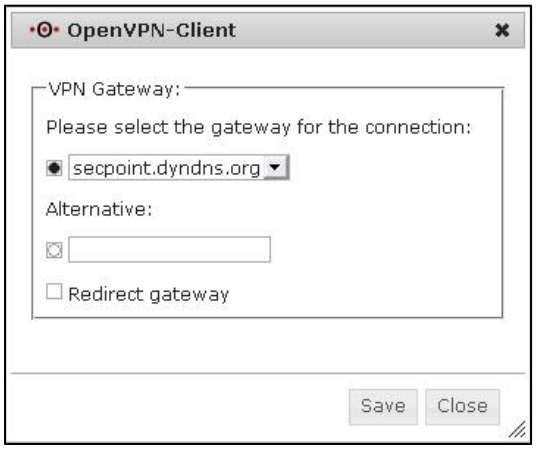


fig. 181 settings for the OpenVPN client

11.3.6 Delete CA and Certificate

You cannot delete the CA or certificates directly. You can only revoke them so they aren't valid anymore. Revoked certificates are store as invalid, so nobody can use them for authentication anymore.

Note: If you revoke a CA, all certificates which are signed with this CA, will be revoked too.

- Switch to the corresponding tab (***CA*** or ***Certs***).
- Click on the ***Trash Can*** symbol at the end of the row.
- Answer the security query with ***Yes***.
  The CA or the certificate will get the status ***Revoked***.
  The invalid files will be listed on the tab ***Revoked***.

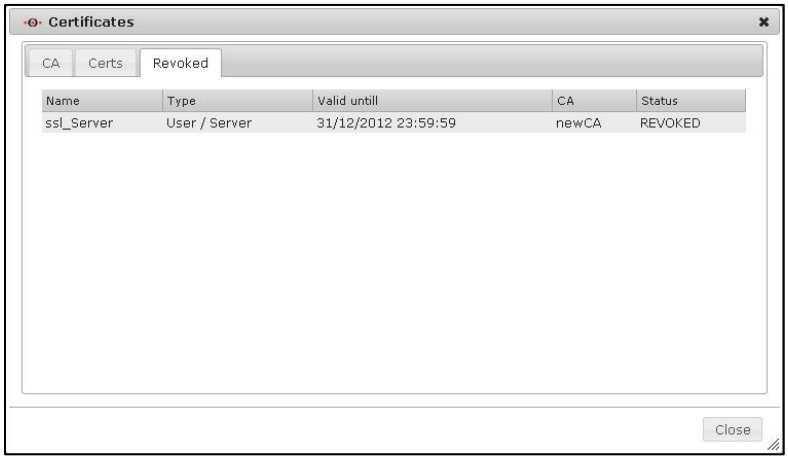


fig. 182 revoked certificate in the tab Revoked

11.3.7 Tab CRLs

On the tab CRLs the Certificate Revocation Lists are listed. These lists have the same name as the relating CA. If a certificate is revoked, it is stored in the CRL of the CA it is signed with. The lists can be exported. So other sites which are also use certificates of the appliance cab be informed of revoked certificates.
Furthermore CRLs from other sites can be imported. This files must have the CRL format.

- Switch to the tab ***CRLs***.
  All CRLs of self created CAs and imported CRLs are show on this tab.
- For ***export*** a CRL click the ***button*** with the ***disk symbol***.
  The browser will open a dialog in which you can select the saving path.
- For ***import*** a CRL click the ***button*** with the label ***Import***.
  Enter the whole path of the file into the appearing dialog or click ***Browse*** the search the file in the local system.
- Afterward click ***import***.

- Importet CRLs can also be ***deleted***.
  Click the ***button*** with the ***trashcan symbol*** to delete the relating CRL.
- ***Confirm*** the security question.

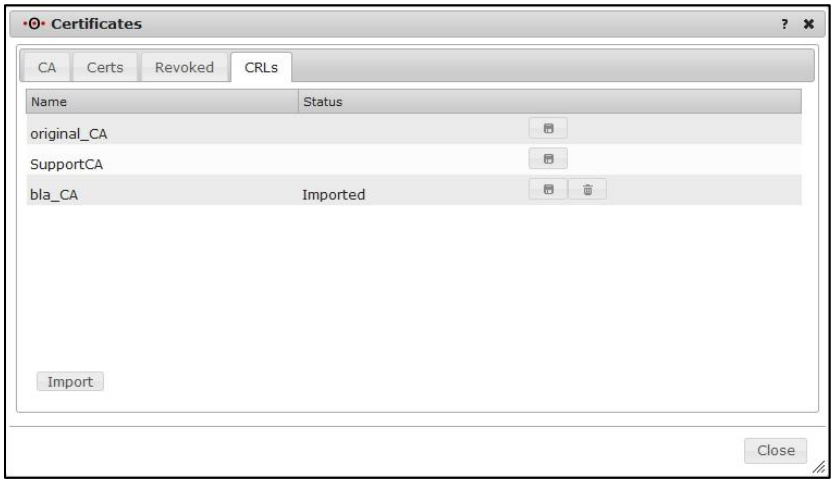


fig. 183 tab CRLs

12 Menu Extras

In this section you will find options to customize the administration interface and functions for advanced users.

fig. 184 dropdown menu extras

name	description
CLI	Command Line Interface Logging of the command line in- and output. Sending commands to the appliance.
Update Firewall	Update the firewall software and the virus database.
Changelog	Shows changes from one version to the previous version of the fire-wall software.
Registration	Upload the license file.
Manage Cockpit	Select the shown section windows and their positioning in the cockpit.
Advanced Settings	Opens a new browser window for configuration for experienced users.
Refresh All	Reads the configuration data of the firewall and reloads the cockpit.
Refresh Cockpit	Reloads the values of the cockpit. The button in the navigation bar offers the same function.

12.1 CLI

The command line interface (CLI) sends commands to the firewall software. Most functions of the administration interface are based on such commands. This section offers to log the in- and output of the CLI. Furthermore you can send commands directly to the firewall.

12.1.1 CLI Log

On this tab you can activate the logging of the CLI in- and output. The logging is disabled by default.
Send commands to the firewall are colored blue.
Answers of the firewall are colored green.

- To enable the logging, activate the checkbox ***Enable CLI Log***.
- The logging can always show the current entries. To enable this function activate the checkbox ***Enable autoscroll***.

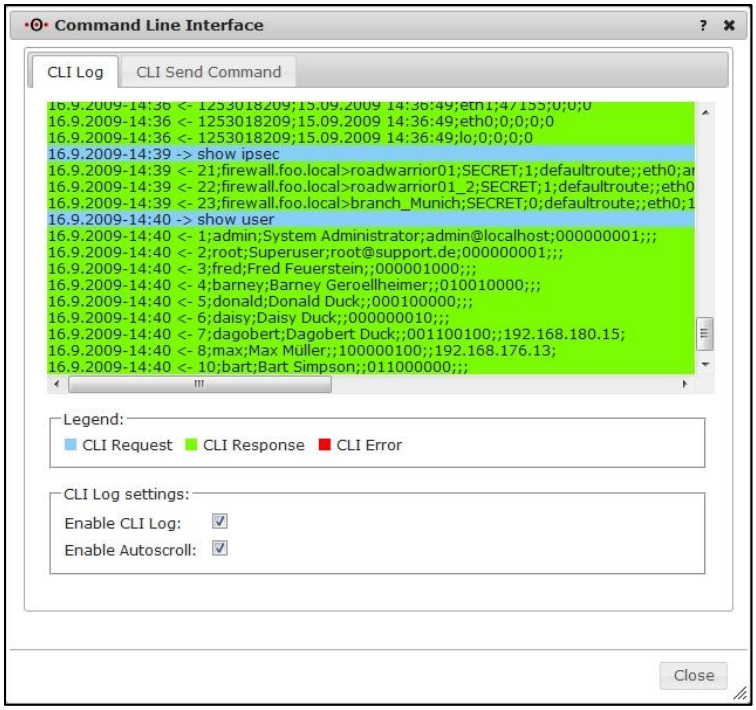


fig. 185 CLI logging

12.1.2 CLI Send Command

In this tab you can send commands directly to the firewall. For this you have to use special CLI commands. For further information on these commands check the CLI reference which is available on the Securepoint website.

- Type the desired CLI command into the field ***CLI***.
- Confirm the sending of the command with ***Send Command***.
- The command and the answer of the firewall appear in the text window.

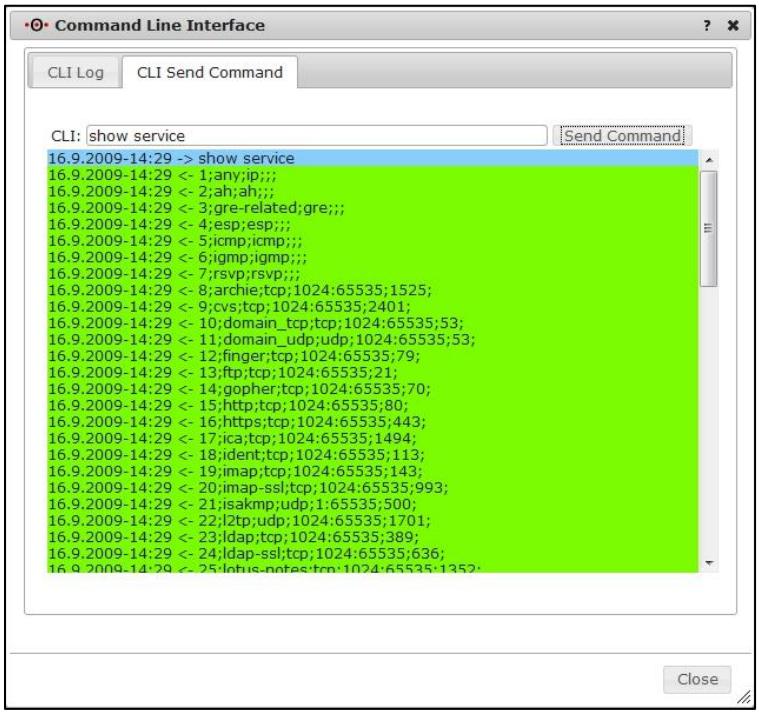


fig. 186 send CLI command

12.2 Updates

You can update the firewall software and the virus pattern database at this menu item. The firewall will connect to the Securepoint Server and looks for new versions.
Updates are only available with a valid license.

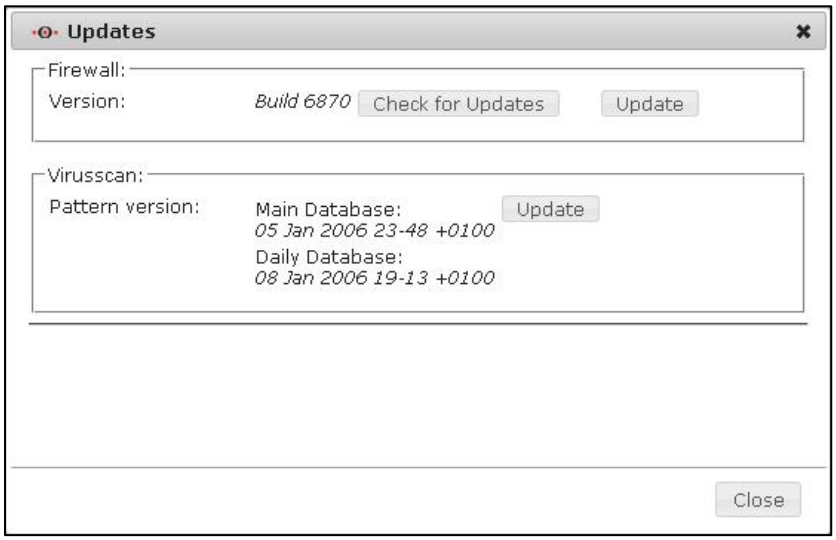


fig. 187 dialog for updating firewall software and virus pattern database

12.2.1 Update the Firewall

The version of the firewall software is given as a build number. First check if a newer version is available. An immediate update will not check the build number but rather updates the firewall with the same version number.
The update stops all services and restarts the firewall. Therefore you should update the software only if a newer version is available.

- First click the button ***Check for Updates***. The firewall checks the server for new versions.
- If the firewall answers that a new version is available, click ***Update***.

fig. 188 update firewall software

12.2.2 Update Virus Pattern Database

The virus scanner can be adapted immediately. If no newer version is available, the update will not be executed. If a new database is installed, the scanner will be restarted.
The virus scanner checks every hour for updates automatically.

- Click ***Update***.

fig. 189 update virus pattern database

12.3 Changelog

The function Changelog offers the possibility to show the changes of one version of the firewall software to the previous version.
The published versions are listed in the dropdownbox.

- Go on the point ***Extras*** in the navigation bar and click the entry ***Changelog*** in the dropdownmenu. The dialog ***Changelog*** appears which shows the changes from the previous version to the actual version.
- To show changes of former versions, select the desired version from the ***dropdown-box*** and click ***Show***.

Note: Only changes form one version to the next version are shown.

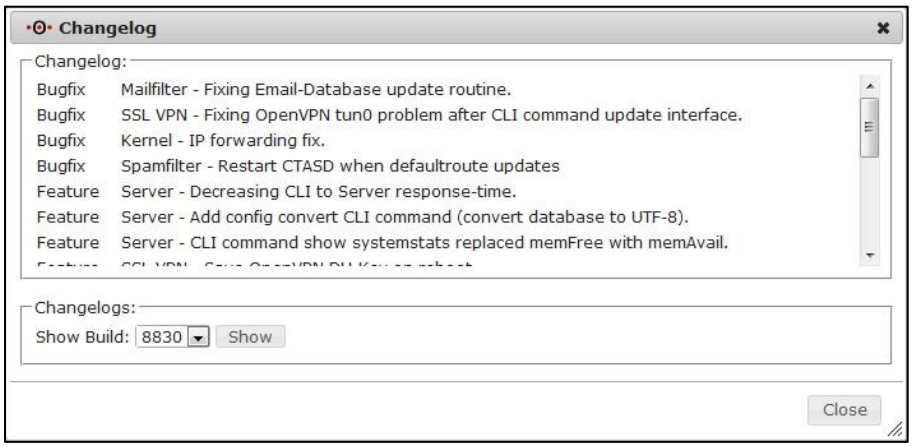

Changelog
Changelog:
Bugfix Mailfilter - Fixing Email-Database update routine.
Bugfix SSL VPN - Fixing OpenVPN tun0 problem after CLI command update interface.
Bugfix Kernel - IP forwarding fix.
Bugfix Spamfilter - Restart CTASD when defaultroute updates
Feature Server - Decreasing CLI to Server response-time.
Feature Server - Add config convert CLI command (convert database to UTF-8).
Feature Server - CLI command show systemstats replaced memFree with memAvail.
Changelogs:
Show Build: 8830
Show
Close

fig. 190 changes from one version to the next

12.4 Registration

Here you can upload your license file. If you don't have a license yet, you can follow the hyperlink in the dialog to access the Securepoint website and register your appliance. Upload the license file like this:

- Click ***Browse*** and select the license file from your file system.
- Click ***Upload*** to upload the file.

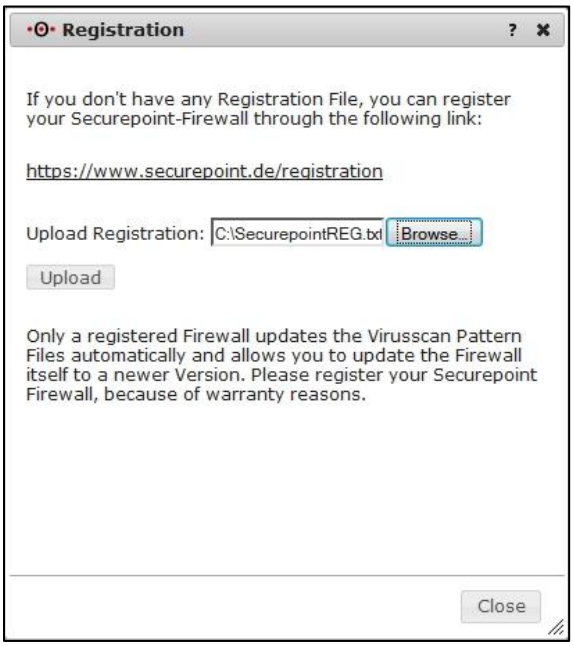

Registration
If you don't have any Registration File, you can register your Securepoint-Firewall through the following link:
https://www.securepoint.de/registration
Upload Registration:
C:\SecurepointREG.txt
Browse...
Upload
Only a registered Firewall updates the Virusscan Pattern Files automatically and allows you to update the Firewall itself to a newer Version. Please register your Securepoint Firewall, because of warranty reasons.
Close

fig. 191 upload registration file

12.5 Manage Cockpit

This menu item offers the possibility to customize the cockpit. You can hide lists which are uninteresting for you. Furthermore you can position the lists to your needs.

- The dialog ***Manage Cockpit for user: x*** is divided into three sections.
- On the left the section ***Not displayed dialogs***. Lists positioned here are not displayed.
- In the middle the section ***Display in Cockpit Left***. Shown lists will be displayed on the left side of the cockpit.
- On the right the section ***Display in Cockpit Right***. Shown lists will be displayed on the right side of the cockpit.
- You can move the list per ***Drag and Drop***.
  You can manage the lists not only ***horizontally*** but also ***vertically***.
- Store your settings with ***Save***.

fig. 192 customize the cockpit

12.6 Advanced Settings

This menu item opens a new browser window which offers settings for experienced users. You can for example edit the templates of all services and applications and read out the used variables.

Note: Make only changes in this section if you know what you're doing.
An incorrect usage of these options can damag the correct functionality of the appliance or completely destroy the configuration.

For these reasons following message is shown by opening the new browser window.

fig. 193 warning by clicking menu item advanced settings

12.6.1 Buttons

If you made changes in this section the changes will not take effect till you update the application, the interface or the rule.

name	description
Update Applications	Updates the applications and applies the changes.
Update Interface	Updates the interfaces and applies the changes.
Update Rule	Updates the rules and applies the changes.
Save Config	Stores the changes in the current configuration.
Close	Closes the browser window Advanced Settings.

fig. 194 buttons in the window advanced settings

12.6.2 IPSec

You can disable the support of IKEv1 and IKEv2 for IPSec connections.

If you disable both servers, IPSec connections cannot be established.

- To ***disable*** a server click the related button ***Off***.
- To ***enable*** a server click the related button ***On***.

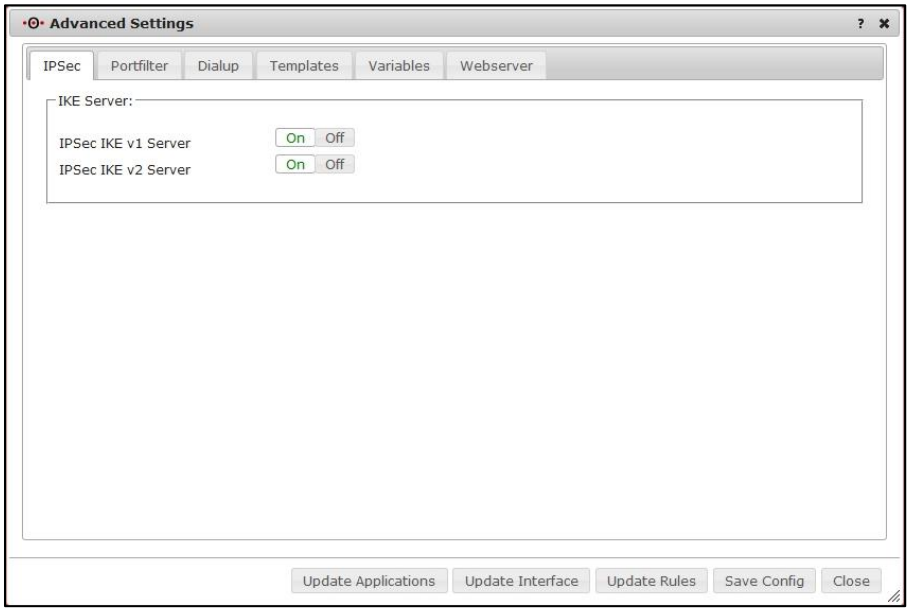


fig. 195 switch states of IKEv1 and IKEv2 servers

12.6.3 Portfilter

Make a setting for the allowance of IPSec connections.

- Activate the first checkbox to ***Accept all incoming IPSec***.
- Activate the checkbox ***Allow related connections*** to allow iptables to accept all packets of existing connections per connection tracking.
- Store the settings with ***Save***.
- For applying the rules immediately click the button ***Update Rules***.

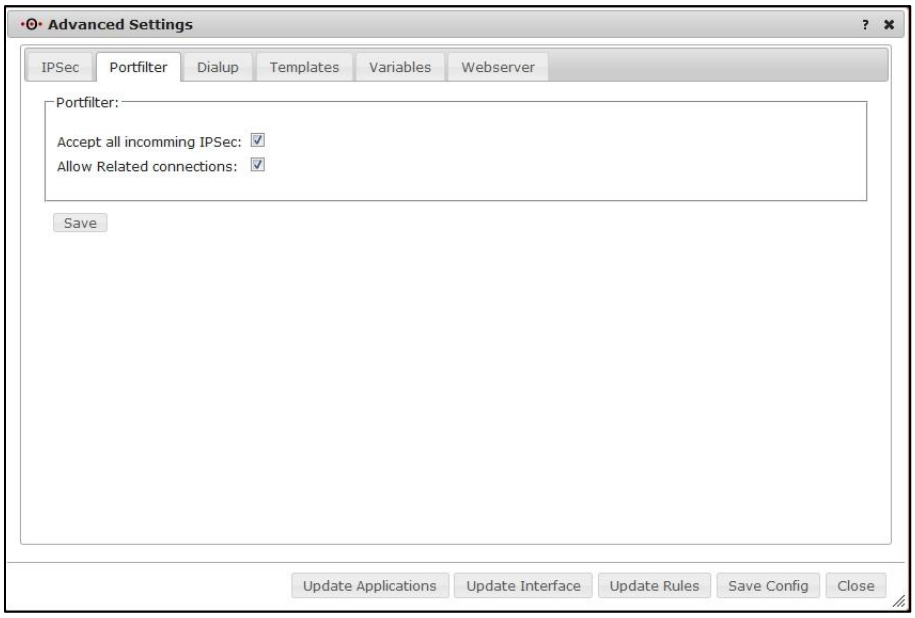


fig. 196 edit portfilter settings

12.6.4 Dialup

LCP (Link Control Protocol) echo requests are used to control the existence of a connection. Several internet service providers don't support this checking. For this you should disable the checking.

- To disable the checking deactivate the checkbox ***Support LCP Echo for PPPoE***.
- Store your setting with ***Save***.
- For applying the changes immediately click the button ***Update Interface***.

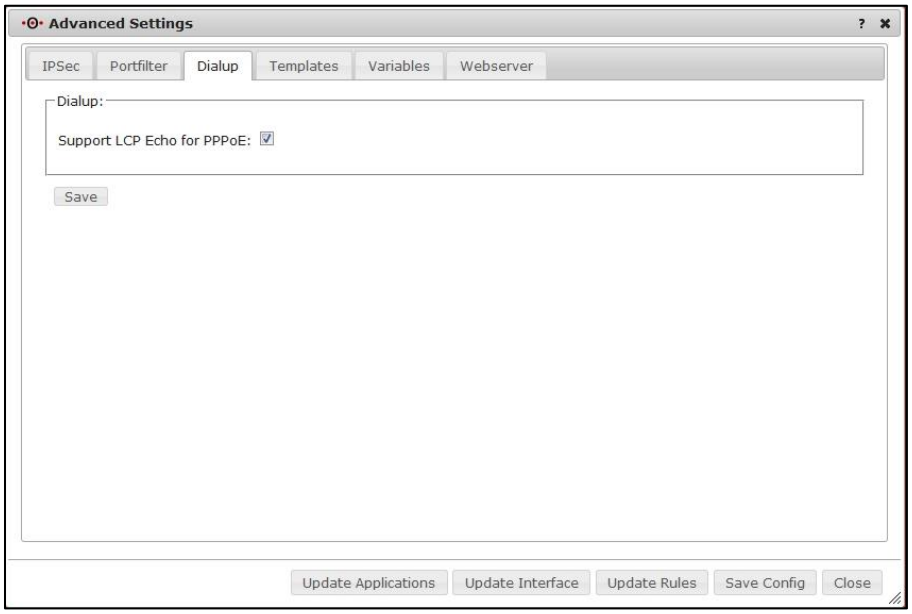


fig. 197 enable /disable the LCP echo request

12.6.5 Templates

On this tab you can edit all templates on the firewall.

- Select the application you want to edit from the dropdown list ***Applications***.
  The firewall displays the depending templates in the dropdown field ***Templates***.
- Select the template you want to edit from the dropdown box ***Templates***.
  The template will be displayed in the section ***Template Content***.
- Adjust the template for your needs.
- Store the changes with ***Save Template***.
- For applying the changes immediately click the button ***Update Applications***.

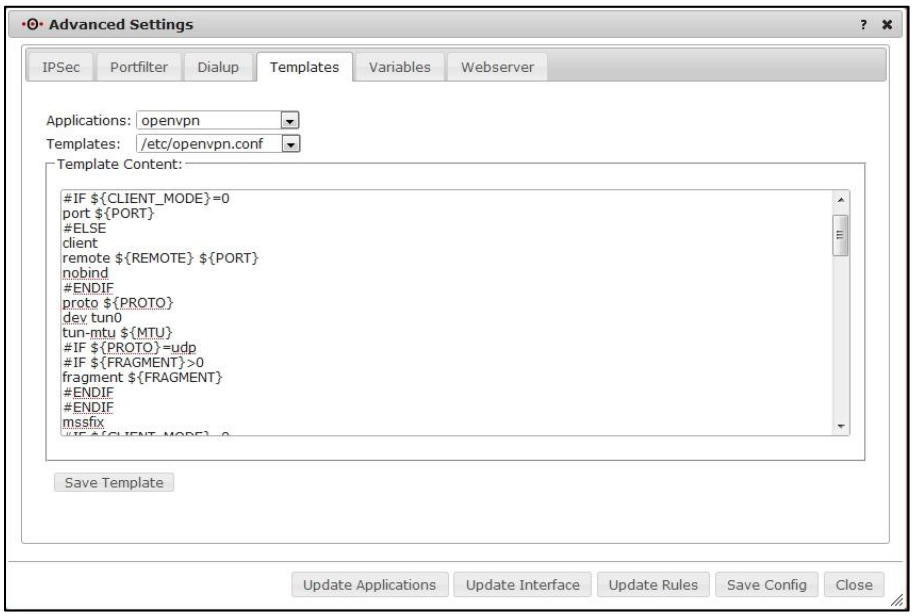


fig. 198 edit template

12.6.6 Variables

On this tab you can show the template variables and their values. You can also add new variables. The added values just stay until a reboot of the appliance.

- Select the application from which you want to see the variables in the dropdown box ***Applications***.
- The variables are shown in the window ***Entries.***
- To show the value of a variable click on the ***loupe symbol*** in the related row.
  The value is shown in the window ***Entry Value***
- Click ***trashcan symbol*** to delete the value.
- Beneath the dropdown box ***Applications*** is an entry field.
  To add a variable enter the name of the new variable in this field and click ***Add Entry***.
- The changes are saved immediately and exist until the next reboot of the appliance.
- For applying the changes click the button ***Update Applications***.

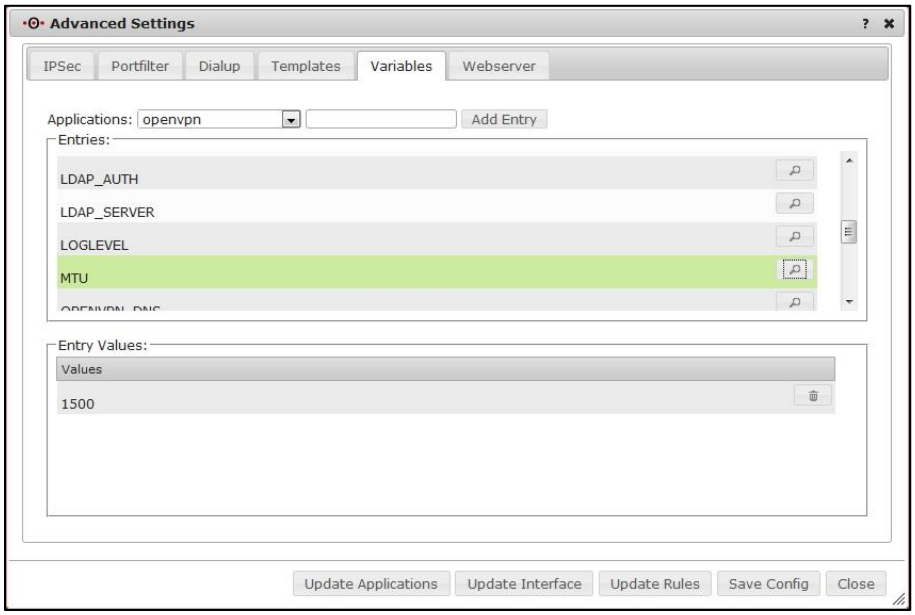


fig. 199 show variables and their values

12.6.7 Webserver

On this tab you can change the port of the webserver for the user interface.

By default the port of the webserver for SSL encrypted connections is 443.

- Enter the desired port into the field or use the ***arrow buttons*** to select the desired port.
- Store your changes with ***Save***.
- For applying the changes click the button ***Update Applications***.

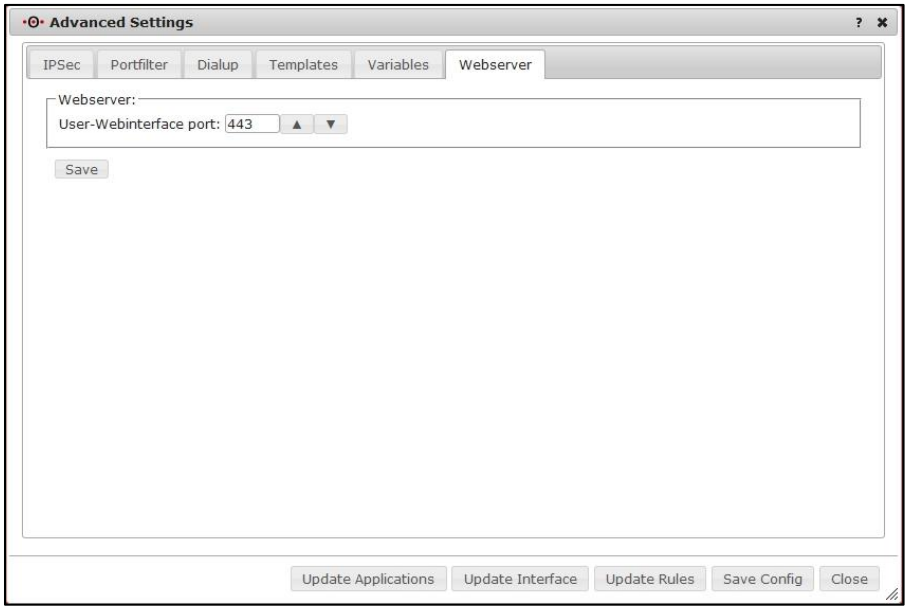


fig. 200 change the port of the webserver

12.7 Refresh All

This function reloads all data of the appliance and rebuilds the cockpit.
So you can update data in the cockpit which are changed per CLI and not in the administration interface.

12.8 Refresh Cockpit

This function reloads all data of the cockpit and rebuilds the cockpit.

The button in the navigation bar has the same function.

13 Menu Live Log

The Live Log shows the current log entries. For a clear view the entries are highlighted in different colors. Furthermore the logs can be filtered.

name	description
Day	Shows the day of occurrence. In the Live Logging the current date. Shows the protocol or the action additionally.
Time	Shows the time in hours, minutes and seconds. (hh:mm:ss)
Service	Shows which service is affected.
Content	Detailed log message.

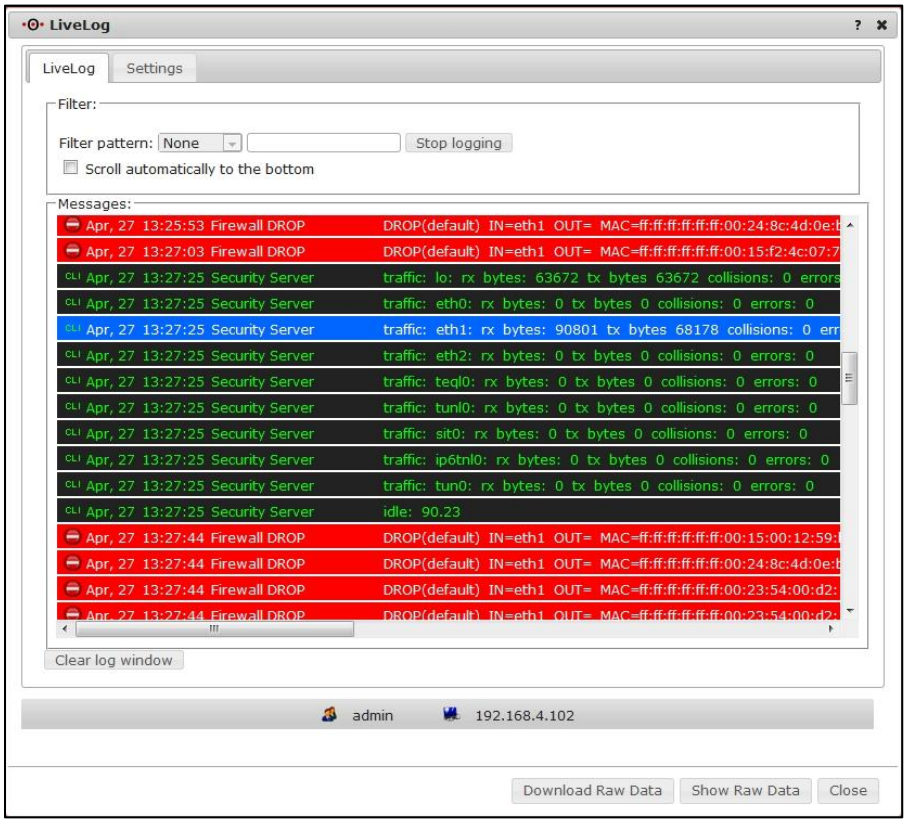

LiveLog
LiveLog
Settings
Filter:
Filter pattern:
None
Stop logging
Scroll automatically to the bottom
Messages:
Apr, 27 13:25:53 Firewall DROP DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:24:8c:4d:0e:
Apr, 27 13:27:03 Firewall DROP DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:15:f2:4c:07:7
Apr, 27 13:27:25 Security Server traffic: lo: rx bytes: 63672 tx bytes 63672 collisions: 0 errors
Apr, 27 13:27:25 Security Server traffic: eth0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
Apr, 27 13:27:25 Security Server traffic: eth1: rx bytes: 90801 tx bytes 68178 collisions: 0 err
Apr, 27 13:27:25 Security Server traffic: eth2: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
Apr, 27 13:27:25 Security Server traffic: teql0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
Apr, 27 13:27:25 Security Server traffic: tunl0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
Apr, 27 13:27:25 Security Server traffic: sit0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
Apr, 27 13:27:25 Security Server traffic: ip6tnl0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
Apr, 27 13:27:25 Security Server traffic: tun0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
Apr, 27 13:27:25 Security Server idle: 90.23
Apr, 27 13:27:44 Firewall DROP DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:15:00:12:59:
Apr, 27 13:27:44 Firewall DROP DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:24:8c:4d:0e:
Apr, 27 13:27:44 Firewall DROP DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:23:54:00:d2:
Clear log window
admin
192.168.4.102
Download Raw Data
Show Raw Data
Close

fig. 201 entries in the live log

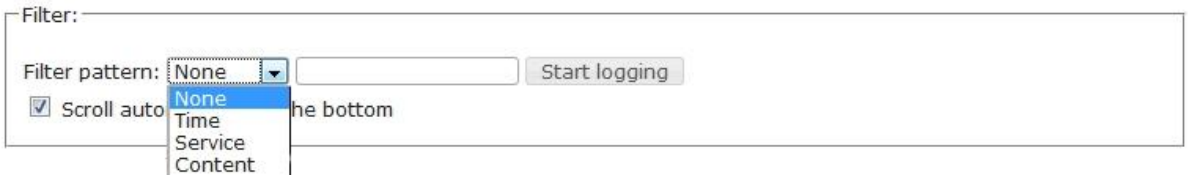
13.1 Start Live Log

When you enter the Live Log window the logging is out of action. You can also not enter any search pattern.
To start the logging complete the following approach.

- Click on the icon ***Live Log*** in the navigation bar.
  A new browser window appears.
- Click the button ***Start logging*** at the right side above the table.
  The live logging starts.
- The text of the button turns to ***Stop logging***.
- Click the button again to stop the logging.

13.2 Search function

When you started the live logging, all events which are logged will be shown.
If you look for something special, use the filter function. You find the filter function centered above the event table. The function works only, when the logging is active.



- Stop a running logging.
- Select a pattern from the dropdown box ***Filter pattern***.
  - ***Time:*** Filters the entries by time.
  - ***Service:*** Filters the entries by service.
  - ***Content:*** Filters the entries by message text.
- Enter a search pattern into the right field.
  The search pattern is depended on the selected filter.
  - ***Time*** can be given in hours, minutes and seconds. Use colons as separators.
    For example: 13:16:09 ; 8:36:00
    You can filter by hours and skip the minutes and the seconds. The entry must end with a colon.
    For example: 16: ; 9:
    You can filter by minutes and skip the hours and seconds. The entry must begin and end with a colon.
    For example: :27: ; :09:Service

- **_Service:_** If you filter by service you don't have to know the service concretely. You can also use parts of words.
  For example: webserver ; server
- **_Content:_** The content of protocol messages is very different. If you don't know a concrete error message, you can search for an IP addresses.

➢ Start the log with ***Start logging***.

➢ You can invert the filter. The filter will show all entries which don't match the search pattern.
To enable this option activate the checkbox ***Inverse filter*** on the tab ***Settings***.

➢ By default the option ***Scroll automatically to the bottom*** is activated. New entries are appended to the list. So this option always shows the newest entries.

13.3 Tab Settings

Here you can invert the filter. The filter will show all entries which don't match the given search pattern.

Furthermore you can define the number of entries. If the logging has more entries defined, here the oldest entries will be deleted.

Changes on this tab can only be made if no logging is running.

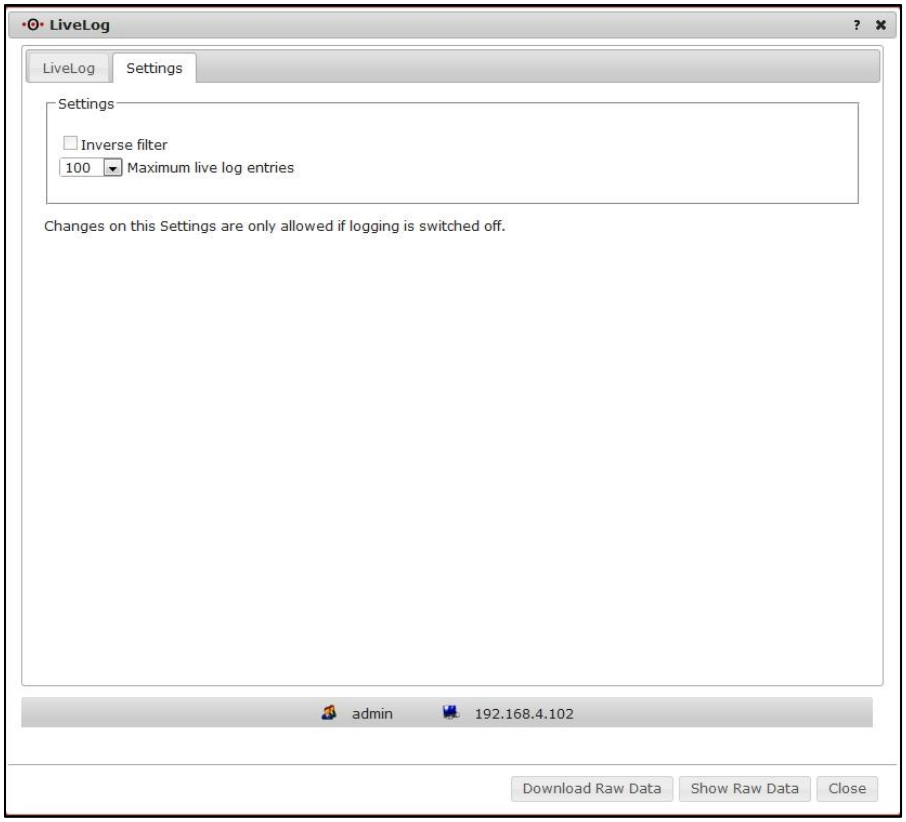


fig. 202 tab settings

13.4 Details of a Log Message

If the automatic scrolling is disabled you can navigate through the log by the arrow keys on the keyboard. If you press the “enter“ key on a marked entry, a window with details of the log message is shown.

This is also shown if you make a double click on an entry with the mouse.

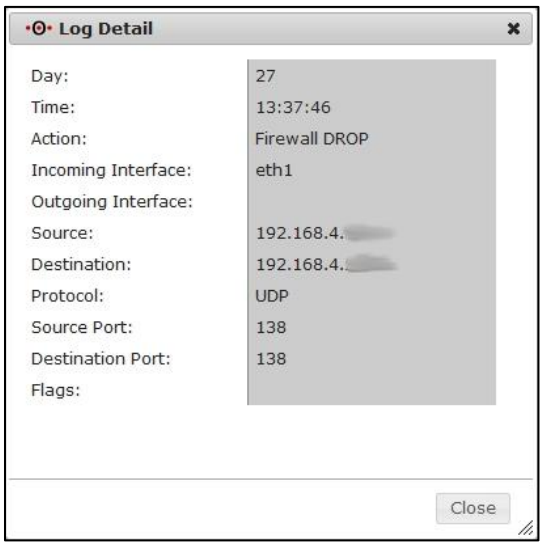


fig. 203 details of a log message

13.5 Raw Data

Entries in the live log are conditioned Syslog messages. You can also display the Syslog messages.

- Click on the button ***Show raw data***.
- The raw data of the current logging are shown. The logging is still running in the background.

You can also download the raw data.

- Click on the button ***Download raw data***.
- The data will be transferred in ***txt*** format.

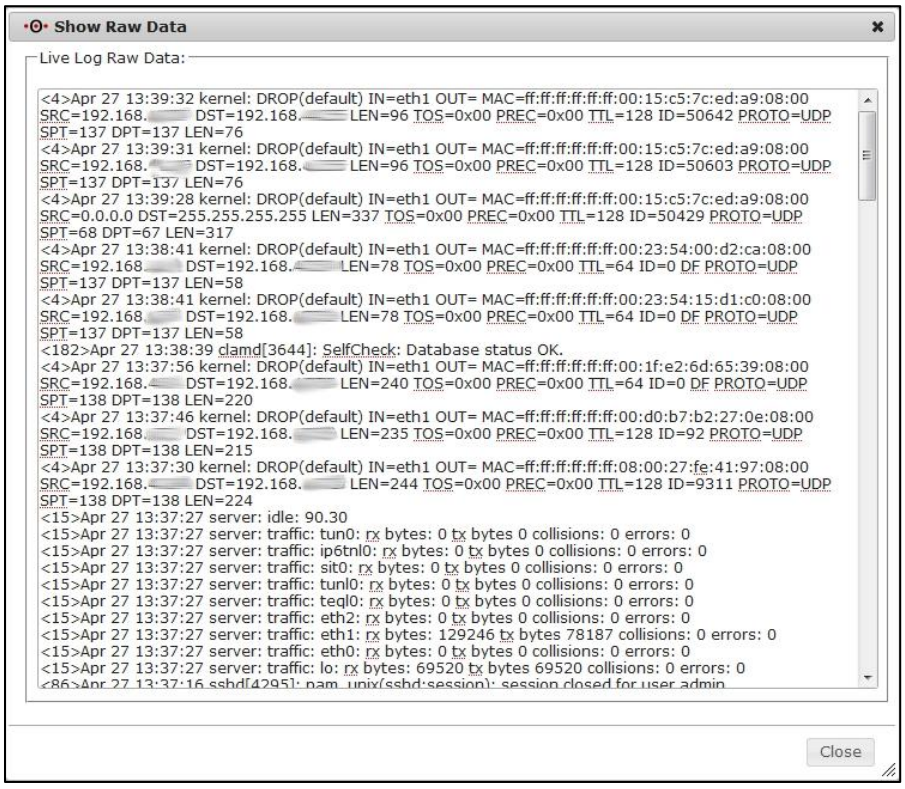

Show Raw Data
Live Log Raw Data:
<4>Apr 27 13:39:32 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:15:c5:7c:ed:a9:08:00
SRC=192.168. DST=192.168. LEN=96 TOS=0x00 PREC=0x00 TTL=128 ID=50642 PROTO=UDP
SPT=137 DPT=137 LEN=76
<4>Apr 27 13:39:31 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:15:c5:7c:ed:a9:08:00
SRC=192.168. DST=192.168. LEN=96 TOS=0x00 PREC=0x00 TTL=128 ID=50603 PROTO=UDP
SPT=137 DPT=137 LEN=76
<4>Apr 27 13:39:28 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:15:c5:7c:ed:a9:08:00
SRC=0.0.0.0 DST=255.255.255.255 LEN=337 TOS=0x00 PREC=0x00 TTL=128 ID=50429 PROTO=UDP
SPT=68 DPT=67 LEN=317
<4>Apr 27 13:38:41 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:23:54:00:d2:ca:08:00
SRC=192.168. DST=192.168. LEN=78 TOS=0x00 PREC=0x00 TTL=64 ID=0 DF PROTO=UDP
SPT=137 DPT=137 LEN=58
<4>Apr 27 13:38:41 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:23:54:15:d1:c0:08:00
SRC=192.168. DST=192.168. LEN=78 TOS=0x00 PREC=0x00 TTL=64 ID=0 DF PROTO=UDP
SPT=137 DPT=137 LEN=58
<182>Apr 27 13:38:39 clamd[3644]: SelfCheck: Database status OK.
<4>Apr 27 13:37:56 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:1f:e2:6d:65:39:08:00
SRC=192.168. DST=192.168. LEN=240 TOS=0x00 PREC=0x00 TTL=64 ID=0 DF PROTO=UDP
SPT=138 DPT=138 LEN=220
<4>Apr 27 13:37:46 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:00:d0:b7:b2:27:0e:08:00
SRC=192.168. DST=192.168. LEN=235 TOS=0x00 PREC=0x00 TTL=128 ID=92 PROTO=UDP
SPT=138 DPT=138 LEN=215
<4>Apr 27 13:37:30 kernel: DROP(default) IN=eth1 OUT= MAC=ff:ff:ff:ff:ff:ff:08:00:27:fe:41:97:08:00
SRC=192.168. DST=192.168. LEN=244 TOS=0x00 PREC=0x00 TTL=128 ID=9311 PROTO=UDP
SPT=138 DPT=138 LEN=224
<15>Apr 27 13:37:27 server: idle: 90.30
<15>Apr 27 13:37:27 server: traffic: tun0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: ip6tnl0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: sit0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: tunl0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: teql0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: eth2: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: eth1: rx bytes: 129246 tx bytes 78187 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: eth0: rx bytes: 0 tx bytes 0 collisions: 0 errors: 0
<15>Apr 27 13:37:27 server: traffic: lo: rx bytes: 69520 tx bytes 69520 collisions: 0 errors: 0
Close

fig. 204 raw data of the log entries

13.6 Colored Labeling of the Service in the Live Log

tag	description
CLI	Communication between Securepoint client and server
dhcp	Communication between dhcp-client and -server
dns	Communication dns; Domain Name Service; client <--> nameserver
dyndns	Communication dyndns-client <--> dyndns-provider
https	Communication https-client <--> server or via https-proxy
http	Communication http-client <--> server or via http-proxy
ids	Messages of the Intrusion Detection Systems
ipsec	Messages of the IPSec-service
l2tp	Messages of the L2TP-service
ntp	Communication ntp; Network Time Protocol; ntp-client <--> server
pop3	Communication pop3; Post Office Protocol 3client <--> server or pop3 via POP3 proxy
PPP	Messages of the pppd-service
pptp	Messages of the pptp-service
smtp	Communication smtp Mail despatch
ssh	Communication ssh; Secure Shell Protocol
AV	Messages by the virus scanner
vnc	Communication VNC client <--> -server or via VNC-proxy
voip	Communication VoIP client <--> -server or via VoIP-proxy
ethX	Interface-messages
	Alerts/warnings of the firewall and the IDS-system
	Drop; dropped data packages
	Accept; accepted data packages
	Reject; rejected data packages with the message Destination Unreachable

Part 2

User Interface

14 Login User Interface

The user interface is useable for all users with the group membership ***User Interface*** in combination with ***Spam Filter Admin***, ***SSL-VPN***, ***SPUVA User*** or the possibility to ***change the password***.

The users can reach the user interface with their webbbroser over the IP address of the internal interface by using the HTTPS protocol.
for example: ***`https://192.168.175.1`***

If the users want to enter the user interface from outside the internal net (for example from the internet or the DMZ), the administrator has to create a firewall rule for reaching the internal interface from outside with the HTTPS protocol.

14.1 The User Interface Sections

The user interface has more sections. The user can access the sections depending on his group membership.

fig. 205 login screen

section	description	visible for groups
Change password	Dialog to change the password. Password length and characters to use according to the settings in the user management.	User Interface with possibility to change password (User management → tab Extras)
Spam filter	Shows all received e-mails and their classification into ham (desired e-mails) and spam (undesired e-mails). Possibility for resorting of misclassified e-mails.	User Interface with Spam Filter Admin
Download SSL-VPN client	ZIP archive which includes the portable OpenVPN client, preconfigured configuration file, CA and user certificate.	User Interface with SSL-VPN
SPUVA Login	Central user authentication to login in to the system.	User Interface with SPUVA-User
Wake on Lan	Remote turn on the registered computers.	User Interface with WoL possibility
Downloads	Shows all downloadable applications and documents on the appliance.	User Interface

14.2 Change Password

This section is only visible for users which are authorized to change their password.

- Login in to the ***user interface***.
- Click the button ***Change Password***.
  The dialog ***Change Password*** appears.
- Enter your current password in the field ***Old Password***.
- Enter your new password into the field ***New Password*** and retype it in the field ***Confirm Password***.
- The password must meet the conditions which are shown in the section ***Password Restriction***.
- Click ***Change Password***.

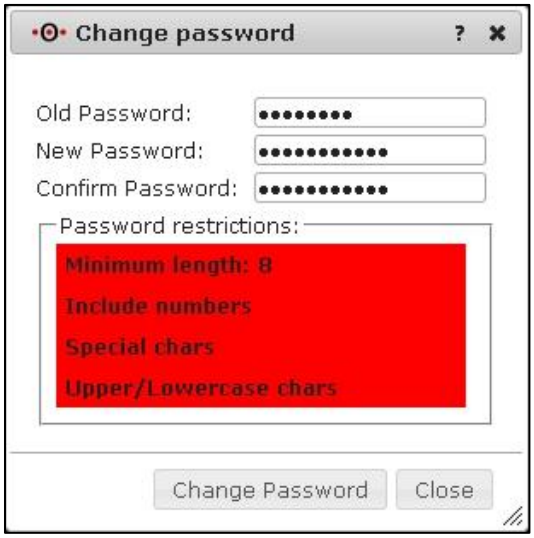


fig. 206 change password

14.3 Download SSL-VPN Client

If the user is member of the groups ***User Interface*** and ***SSL-VPN*** and if the administrator has made settings for the VPN client for this user, he is able to download the SSL-VPN client in this section.

- Login in to the ***User Interface***.
- Click on the button ***Download SSL-VPN Client*** to start the download.
- Select in the browser dialog the option ***Save File*** (or accordingly).
- The downloaded file is a packed ZIP archive including the portable OpenVPN client, a preconfigured configuration file and the needed certificates.

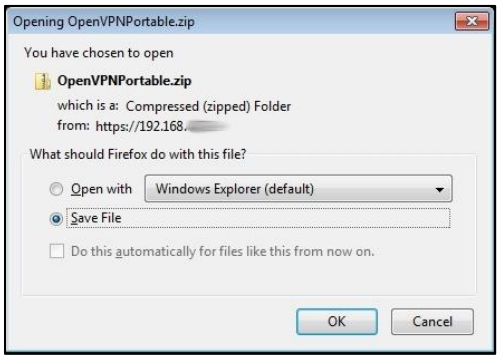


fig. 207 save dialog of the Mozilla Firefox

- ***Decompress*** the ZIP archive and ***save*** the directory on your computer or on an USB flash drive.
- ***Open*** the directory. Doubleclick the file ***OpenVPNPortable.exe***. The OpenVPN client starts.
  The OpenVPN client icon appears in the taskbar beneath the clock.
- Click it with the ***right mouse button***. The context menu appears. Start the SSL-VPN connections by clicking ***Connect***.

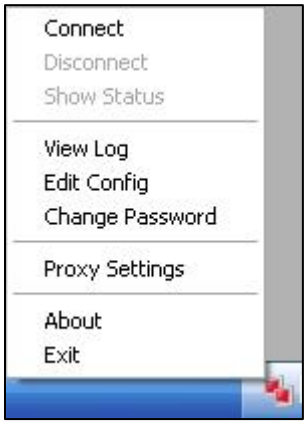


fig. 208 context menu of the VPN client in the taskbar

14.4 Spamfilter

If the user is a member of the groups ***User Interface*** and ***Spam Filter User*** he can access the Spam filter interface

The user can check which e-mails were classified as spam or ham by the system. If he finds e-mails which are misclassified as spam, he can mark them as ham.

It is important to move not identified spam mails from the ham section into the spam section to train the adaptive filter (Bayes filter).

The spam filter interface only shows e-mails, if the spam filter is activated.

14.4.1 Overview over the spam filter interface

The mails are ordered by time (the newest at top).

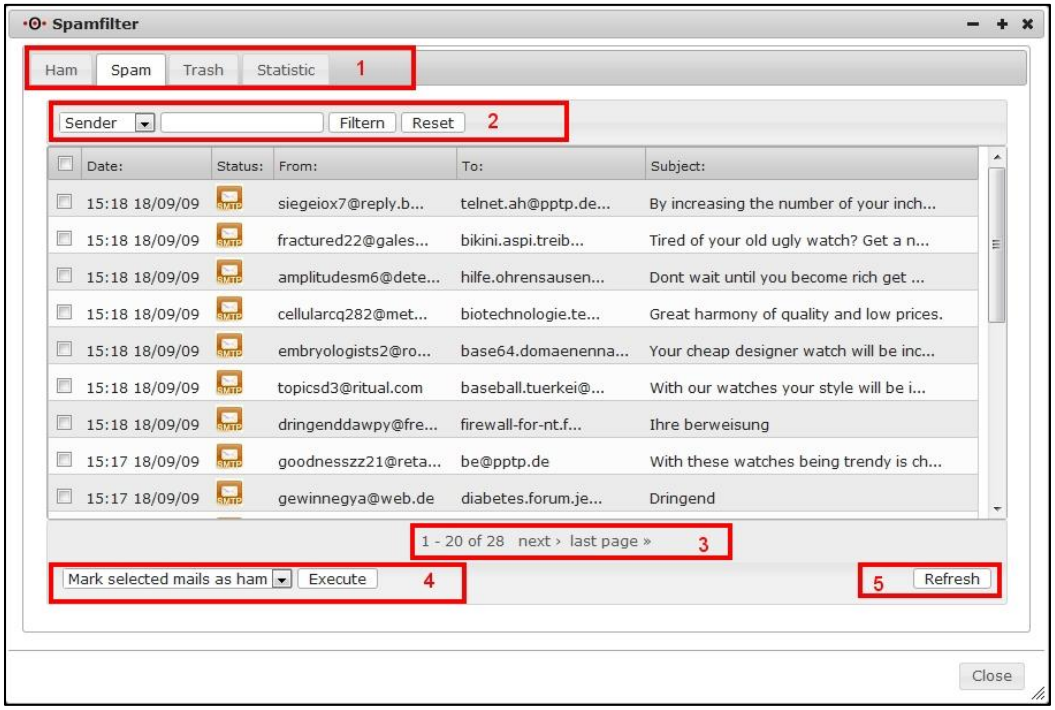


fig. 209 sections and functions of the spam filter

Section	Description
1 Tabs	The display is divided in different sections. ***Ham*** shows identified desired e-mails. ***Spam*** shows identified undesired e-mails. ***Trash*** shows deleted e-Mails (deleted by the ***Spam Filter User***). ***Statistics*** shows a diagram of ham and spam e-mails in dependence on the country of origin Click on the tabs to change the view.
2 Filter	With the filter you can sort the list by: ***Sender***, ***Recipient***, ***Subject***, ***Country***, ***SMTP***, ***POP3***, ***Virus***, ***Blocked*** For some criteria a pattern is needed. Insert the pattern in the input field. Execute the filter by clicking on ***Filter***. You can reset the selection by clicking on ***Reset***.
3 Navigation	The display shows 10 entries per side. With the buttons ***back*** and ***next*** you can scroll through the pages. With the buttons ***first page*** and ***last page*** you can jump to the first or to the last side.
4 Action	You can choose an action (***mark as ham/spam, delete, irrevocable delete***) for all checked e-mails (activated checkbox in the first column). With the action ***Select all e-mails*** you can check or uncheck all e-mails shown on this page. The action will be executed when you click on ***Execute***.
5 Refresh	With the button ***Refresh*** the page will be reloaded.

14.4.2 Columns of the Table

name	description
first column	Activate the checkbox to mark the e-mail. Already marked e-mails will be unchecked if you click the checkbox again.
Date	Date and time of the e-mail.
Status	E-mail type (SMTP or POP3). Shows a symbol if the e-mail contains a virus.
	In the tab Spam is shown which filter has detected the e-mails as spam mail. Bayes filter Commtouch filter
From	Sender of the e-mail.
To	Recipient of the e-mail.
Subject	Subject of the e-mail.

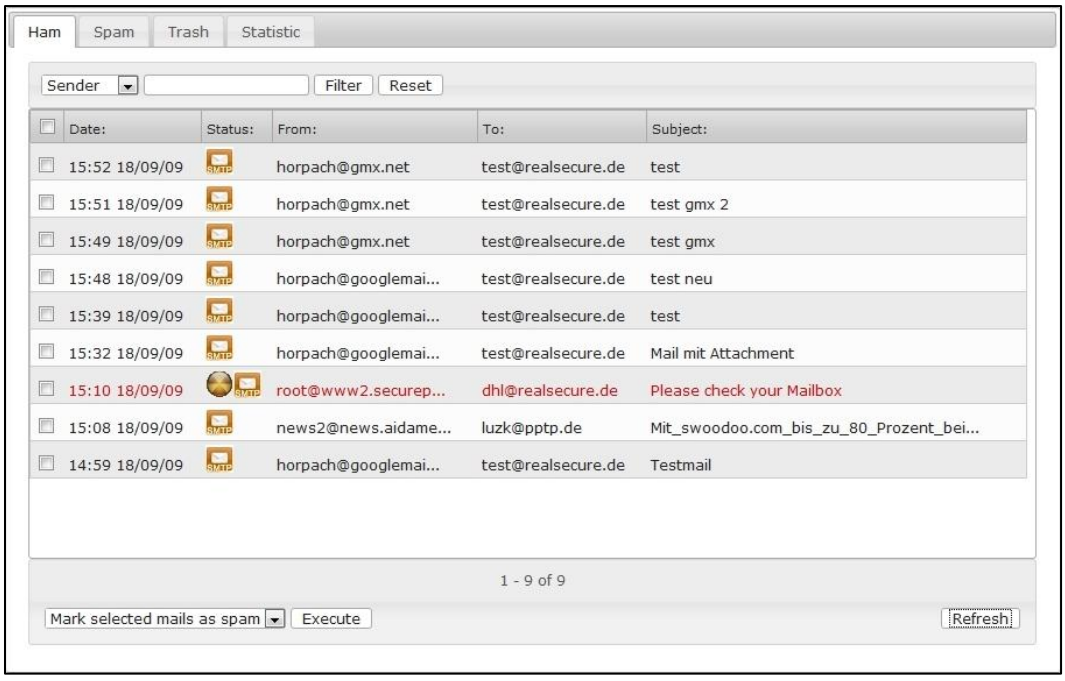


fig. 210 columns in the tab Ham

14.4.3 Details of an E-mail

The Spam Filter User can take a look at the content of an e-mail. The content and the attachments are only displayed if these options are activated in the spam filter settings. Otherwise only the e-mail header is shown.

Note: Showing the content of an e-mail may violate the data privacy.
Notice the data protection act of your state.

- Activate the detailed view with a ***doubleclick*** in the row of the desired e-mails.
- Attachment of the mail will be displayed as a ***hyperlink*** in the row at the bottom of the window.
- ***Click*** on the hyperlink to download the attachment.

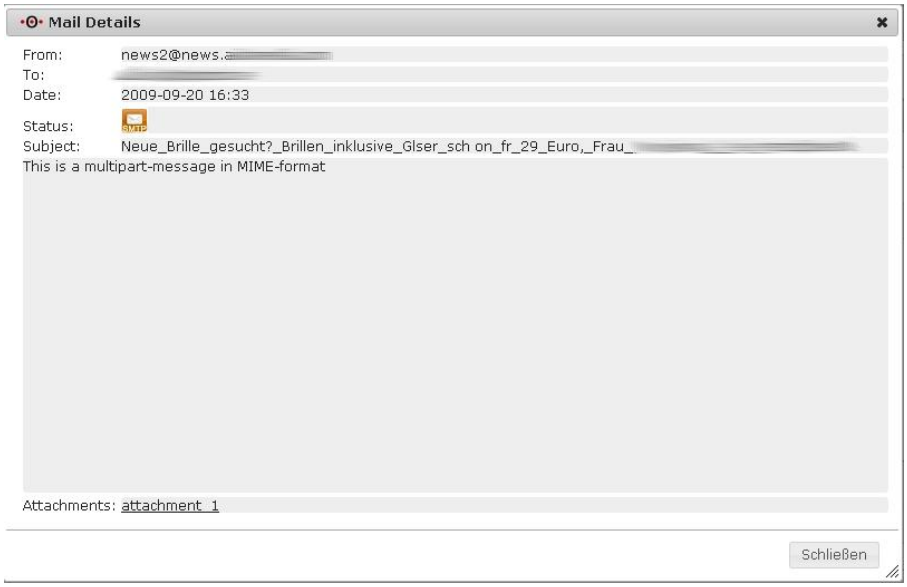


fig. 211 view of details

14.4.4 Action on the Tab Ham

You can execute the following actions on the e-mails:

– Mark selected e-mails as spam	Marks the selected e-mails as spam and moves them to the tab ***Spam***.
– Delete selected e-mails	Moves the marked e-mails to the tab ***Trash***.
– Resend selected e-mails	Sends the marked e-mails again.
– Select all e-mails	Marks all e-mails on this tab.
– Delete all e-mails	Moves all e-mails on this tab to the tab ***Trash***.
– Resend all e-mails	Sends all e-mails on the tab again.

fig. 212 actions on the tab Ham

14.4.5 Action on the Tab Spam

You can execute the following actions on the e-mails:

– Mark selected e-mails as ham	Marks the selected e-mails as ham and moves them to the tab ***Ham***.
– Delete selected e-mails	Moves the marked e-mails to the tab ***Trash***.
– Resend selected e-mails	Sends the marked e-mails again.
– Mark all e-mails as ham	Marks all e-mails on this tab as ham and moves them to the tab ***Ham***.
– Delete all e-mails	Moves all e-mails on this tab to the tab ***Trash***.
– Resend all e-mails	Sends all e-mails on the tab again.

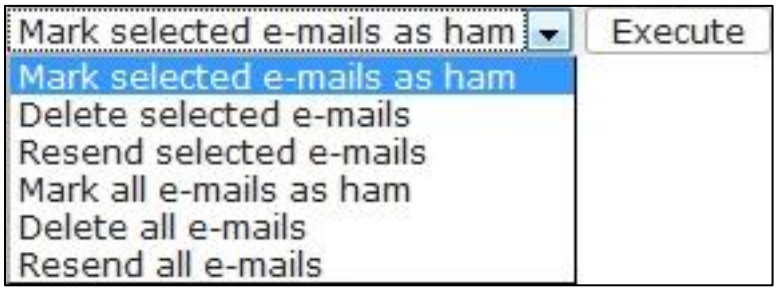


fig. 213 actions on the tab spam

14.4.6 Actions on the Tab Trash

You can execute the following actions on the e-mails:

– Mark selected e-mails as ham	Marks the selected e-mails as ham and moves them to the tab ***Ham***.
– Mark selected e-mails as spam	Marks the selected e-mails as spam and moves them to the tab ***Spam***.
– Delete selected e-mails permanent	Deletes the marked e-mails irrevocably.
– Resend selected e-mails	Sends the marked e-mails again.
– Mark all e-mails as ham	Marks all e-mails on this tab as ham and moves them to the tab ***Ham***.
– Mark all e-mails as spam	Marks all e-mails on this tab as spam and moves them to the tab ***Spam***.
– Delete all e-mails permanent	Deletes the e-mails on this tab irrevocably.
– Resend all e-mails	Sends all e-mails on the tab again.

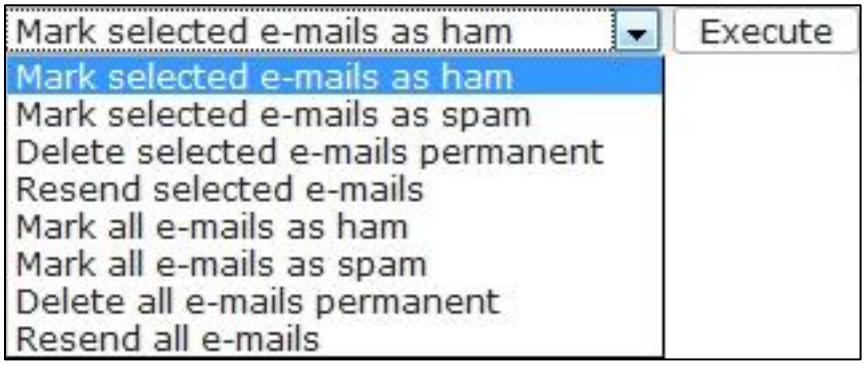

Mark selected e-mails as ham
Execute
Mark selected e-mails as ham
Mark selected e-mails as spam
Delete selected e-mails permanent
Resend selected e-mails
Mark all e-mails as ham
Mark all e-mails as spam
Delete all e-mails permanent
Resend all e-mails

fig. 214 Actions on the tab trash

14.4.7 Tab Statistic

On this tab the ratio of spam and deleted e-mails to ham e-mails is shown graphically. Further diagrams show the numbers of mails depending on their origin.

14.4.7.1 Filter

With the filter function above the diagram all statistics can be displayed for different time intervals.

- Select the interval from the dropdown box.
  Possible intervals are:
  - Today
  - Yesterday
  - Last week
  - Last month
- Click ***Refresh*** to reload the diagram.

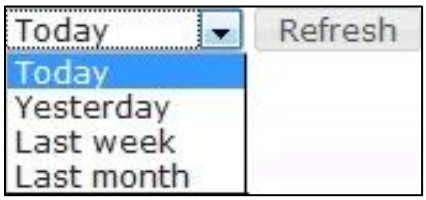


fig. 215 select intervall

14.4.7.2 Tab General

On this tab a diagram shows the total number of ham e-mails, spam e-mails and deleted e-mails. The blue lines clarify the total amount of every bar on the y-axis.

The legend on the right side shows the numbers of every section and the percentage.

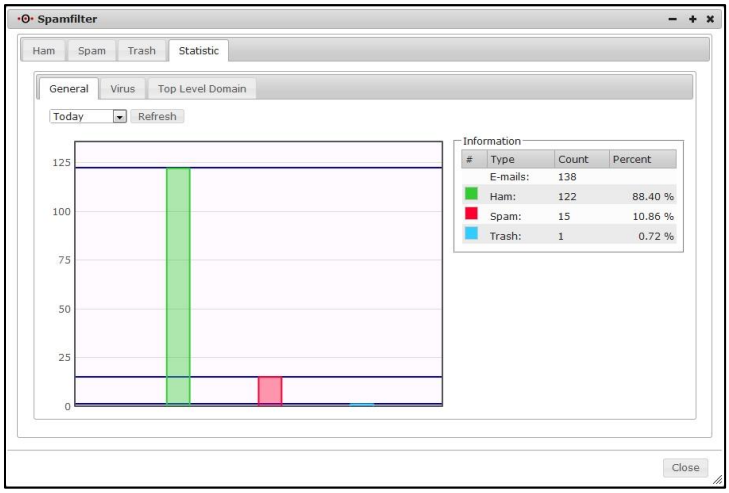


fig. 216 tab general

14.4.7.3 Tab Virus

On this tab a diagram shows the total number of virus infected e-mails. The blue lines clarify the total amount of every bar on the y-axis.

The legend on the right side shows the numbers of every section and the percentage.

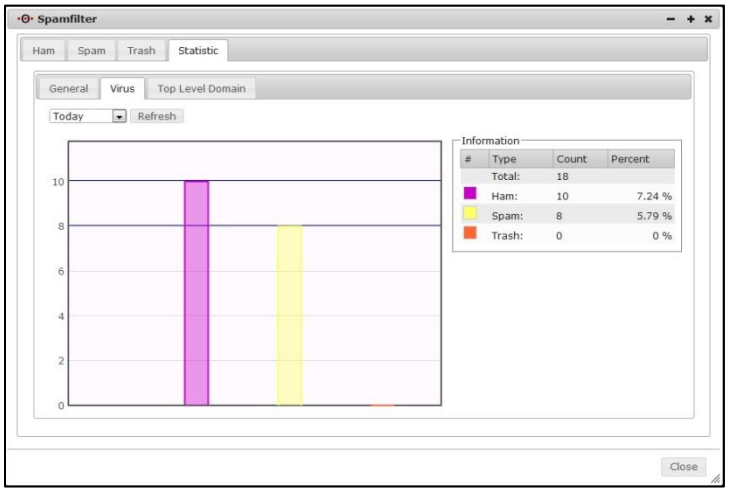


fig. 217 tab virus

14.4.7.4 Tab Top Level Domain

On this tab a diagram shows from which state the e-mails are received. The statistic is split into ham e-mails, spam e-mails and deleted e-mails.

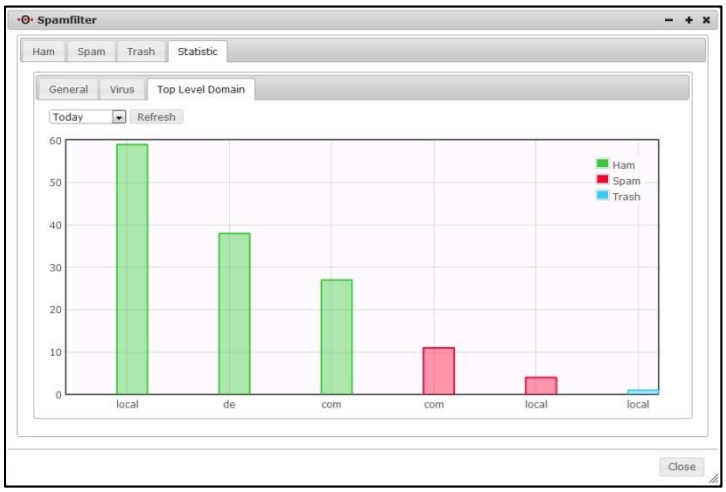


fig. 218 tab top level domain

14.5 SPUVA Login

The Securepoint User Verification Agent (SPUVA) gives users individual rights on computers in the DHCP environment. The user authenticates against SPUVA and gets an individual security policy for any workstation in the network. If the user changes his workplace, he will get the same security policy at the new workplace automatically.

- Login in to the user interface.
- Click on the button ***SPUVA Login***.
- A new browser window appears in which a Java applet is starting.
  Confirm the security query for starting the applet.
  The java applet can only be executed if the Java Runtime Environment is installed. If it isn't installed visit the website http://www.java.com .
- Enter your user name into the field ***User*** and your password into the field ***Password***.
- Click ***Connect*** to login in to the system.
- If the login was successful, the button text changes to ***Disconnect***. Click this button for Logout. You also logout from the system by closing the applet window.
- If the login wasn't successful the text ***"Wrong username/password"*** appears.

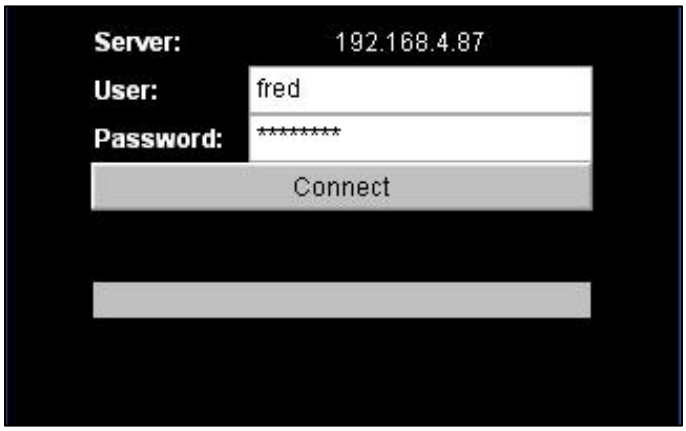


fig. 219 SPUVA login per Java applet

14.6 Wake on LAN

This section is only visible for users which are authorized to use the Wake on LAN function. The user can start registered computers remotely. The user can access the remote computer if according rules are defined.
This function must be supported by the comuter. The settings for this function are made in the BIOS or at the network adapter settings.

- Click on the button ***Wake on LAN*** in the User-Interface.
- The dialog ***Wake on Lan*** appears.
  Here are all computers listed which you allowed to start.
- Click on the ***button*** with the ***start symbol*** . The related computer will be started.

fig. 220 start remote computer

14.7 Download Section

Every user who is member of the group ***User Interface*** can access the download section. The download section offers files and documents which are stored on the appliance. The hyperlink is positioned in the first column of the list. The second column contains the version of the file and the third column contains a short description of the file.

- Login in to the user interface.
- Click the button ***Download***.
- Click on the ***hyperlink*** in the ***first column*** to start the download.
- Click on ***Save*** (or according) in the browser query.
  The download will begin.

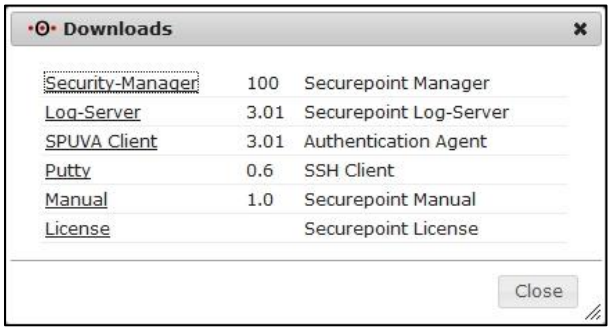


fig. 221 available donwloads

15 Zone Concept of the Securepoint Firewall

To every interface of the appliance one zone or several zones are assigned. For example: To the internal interface the zone ***internal*** is assigned and to the external interface the zone ***external*** is assigned.

For the rule set of the firewall, the administrator has to create network objects (IP addresses or networks) and assign one zone to every network object. This action defines behind which interface a network object is positioned.

A well known attack scenario on a router is to fake a sender IP address (IP Address Spoofing). If the attacker uses a sender address from the internal network and the packet is send from a wrong zone (for example: external) the packet will be dropped automatically on the basis of the zone concept. The administrator doesn't have to create anti spoofing rules.

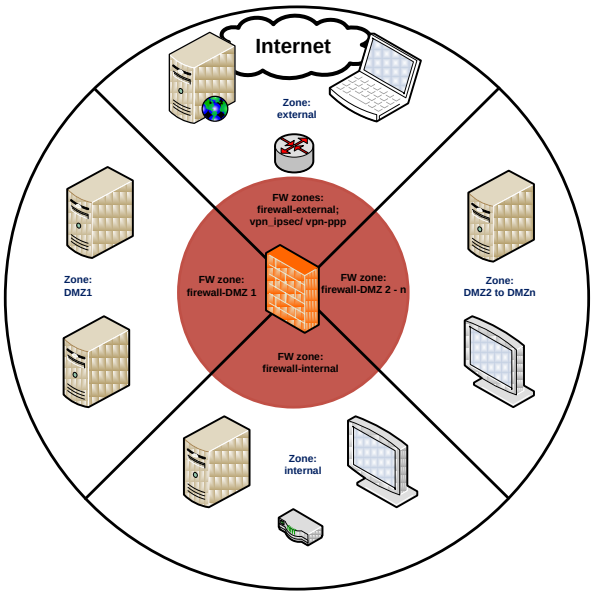


fig. 222 zone concept of the Securepoint firewall

The zone concept is designed in two parts: The firewall zones and the group zones.
The firewall zones contain the zones: ***firewall-internal***, ***firewall-external*** and ***firewall-dmz***.
These zones are provided for the interfaces of the appliance.
A group zone is assigned to one firewall zone. For example: The group zone ***internal*** is assigned to the firewall zone ***firewall-internal*** with the internal interface.
In the group zones computers and networks are positioned, which are connected with the firewall by the related interface.
The VPN zones are provided for VPN computers and networks. These are assigned to the external interface too, but they are different from the devices of the zone ***external*** because they connect the appliance by a secure tunnel.

Zones can only be assigned once. If you want to use two interfaces for the internal net, you have to create a new zone for the second internal net.